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AMERICAN RAILROAD RATES

This One

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AMERICAN

RAILROAD RATES

BY

WALTER CHADWICK NOYES

A JUDGE OF THE COURT OF COMMON PLEAS IN CONNECTICUT; PRESIDENT OF NEW LONDON NORTHERN RAILROAD COMPANY; AUTHOR OF "THE LAW OF INTERCORPORATE RELATIONS"

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TO

L. A. N.

PREFACE

THE railroad problem, with respect to charges, has always been a problem of freight rates rather than of passenger fares. The freight traffic upon the American railroads far exceeds the passenger traffic in volume, complexity, and importance. In order to avoid confusion of statement, this book deals only with freight rates. But the fundamental principles governing rates and fares are the same.

W. C. N.

LYME, CONNECTICUT,
September 20, 1905.

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AMERICAN RAILROAD RATES

CHAPTER I

UNDERLYING PRINCIPLES

THE nature of the railroad enters into the charge for transportation. Its business has few analogies in other enterprises. Chartered to operate a highway of commerce, it exercises far broader powers than other corporations. Its duties are as broad as its powers. Its rates are determined by economic principles peculiar to itself. Its obligations in making charges are of their own kind. Railroad rates are what they are because the railroad is what it is.

A railroad corporation is of a dual nature. The State grants to it the right of eminent domain — the power to condemn lands for its way and structures — for the public benefit. In accepting its charter it assumes obligations to the public and, within constitutional limits, becomes subject to State regulation. In this degree it is a public corporation. On the other hand, the stockholders furnish the means for the construction and equipment of the railroad and are entitled to the profits derived from its operation. To this ex-

Twofold obligations of railroad

tent a railroad company is a private corporation. Being thus at once a public corporation existing for private gain and a private corporation owing public duties, a railroad company is distinctively a *quasi*-public corporation — a corporation of double obligations.

The public duties of a railroad are not wholly dependent upon its corporate character. If it were under no responsibilities to the State in consideration of the grant of its charter it would still owe obligations to the public. It is a common carrier. Its road is a public highway. It applies its private property to a use in which the public is interested. It is engaged in a business affecting the public and is subject to governmental control. "Property does become clothed with a public interest when used in a manner to make it of public consequence and affect the community at large. When, therefore, one devotes his property to a use in which the public has an interest he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good to the extent of the interest he has thus created." [1]

Whether, therefore, the railroad corporation be

[1] Munn *v.* Illinois, 94 U. S. Rep. 125.

That private property when devoted to public use becomes subject to public regulation, was an early rule of the common law. Lord Chief Justice Hale, more than two hundred years ago, said that when private property "is affected with a public interest it ceases to be *juris privati* only." Under this rule it has been customary in England from time immemorial, and in this country since its colonization, to

regarded as of both a public and private nature, or whether its private property be considered as clothed with a public interest, the result is the same — its rates are subject to governmental control. The right of control, however, is not unlimited. Power to regulate is not power to destroy. Limitation is not confiscation. The stockholders and bondholders who furnished the money to build the road and took the risk of its successful operation cannot be deprived of a fair return upon their investment.

At the outset, then, rates must be examined from two essentially different standpoints — private and public. To the extent that a railroad company is a private corporation, and in the sense that its property is distinctly its own, it may fix its rates solely with regard to the interests of its stockholders. It may strive for the largest possible revenue and regulate its charges only in accordance with the laws of supply and demand. It is governed solely by commercial principles. Its object is to make dividends. But in so far as a railroad company is a public corporation or its property is affected with a public interest, its purposes are essentially different. Its object is to promote the welfare of the public rather than the interests of its stockholders. Its aim is not so much to make money as to furnish the public with

regulate the charges of wharfingers, warehousemen, innkeepers, hackmen, millers, bakers, etc., as well as common carriers of goods.

The first statute regulating the charges of common carriers was passed in the third year of the reign of William and Mary.

the best possible facilities. From the public point of view the public benefit is of the first importance. From the private view point the return upon the capital invested is of the greatest moment. The problem is to reconcile the public and private rights without unduly subordinating the one to the other.

The functions of a railroad, like its duties, are of a twofold nature. A railroad differs from other agencies of transportation. The drayman furnishes his wagon and carries the goods of his customers. He uses the public road provided through taxation. The boatman supplies his boat and conveys the articles offered him. He employs the way afforded by nature. Drayman and local express company, boatman and steamship line, are carriers only. Their charges are for *carriage*. The canal company furnishes an artificial way along which the water carrier may transport his cargo. It does not itself operate canal boats. The owner of the turnpike supplies a private road upon which the drayman may carry his goods. He does not carry them himself. Canal company and turnpike owner collect tolls for *passage*. The railroad company combines the functions of carrier and toll taker. It furnishes the road along which, and the means by which, the freight may be moved. Then it completes the service by moving the freight. Its charges represent

Railroad a carrier and toll taker.

(1) The toll for passage of the toll owner.

(2) The charge for carriage of the carrier.

The weight of the passing vehicle is all that affects the turnpike owner. The heavy cart wears out the road and makes repairs necessary quicker than the light pleasure carriage. Weight is seemingly the only basis of tolls. But the owner of the turnpike has ever looked further. The value of the privilege of passing to the owner of the carriage, as well as its weight, has always been considered. From the earliest days of turnpikes, vehicles have been placed in different categories with different tolls — and with weight only a factor entering into the toll. In 1776 Adam Smith recognized the practice in his "Wealth of Nations:" "When the toll upon carriages of luxury, post-chaises, etc., is made somewhat higher in proportion to their weight than upon carriages of necessary use, such as carts, wagons, etc., the indolence and vanity of the rich is made to contribute in a very easy manner to the relief of the poor by rendering cheaper the transportation of heavy goods to all the different parts of the country."[1]

The early canal companies went further than the turnpikes in basing tolls upon value. Their concern was with the commodities carried along the canals, not with the vehicles — the canal boats — in which they were carried. The value of the goods was the important factor. The companies were authorized to collect tolls according to a rough classification which imposed the higher charge upon

[1] Book V. p. 326 (McCulloch's Ed.).

the more valuable article. It was considered that the shipper of manufactured goods could afford to pay more for their passage along the canal than the shipper of sand or limestone. The underlying idea was indirect taxation.

The first railroad companies were regarded, both in England and this country, as being similar to the canal companies. The legislatures and the courts treated them as merely owners of roads upon which rails were placed, and along which all persons had a right to operate their vehicles upon payment of tolls. The railroad was assumed to be a public highway for independent carriers, and railroad companies were empowered to charge tolls in the same way as the canal companies. Thus the charter of the Ithaca and Oswego railroad, granted in 1828, provides that "all persons paying the toll aforesaid may, with suitable and proper carriages, use and travel upon said railroad." [1] Still, almost from the beginning it was customary to authorize the railroads to act with others as carriers upon their own roads, although they had no such power without special authority, and the functions of toll owner and carrier were quite distinct. For example, the Liverpool and Manchester Railway — one of the earliest railroads empowered to use steam — was authorized to form "an establishment for the carriage of goods," and to charge "carriage rates," but

[1] "Suitable and proper carriages" meant, of course, cars with wheels adapted to run on raised rails.

it was required to keep separate accounts of its doings as carrier, and to make separate dividends from that department if any were earned. It was also authorized to charge "tonnage rates" for the use of the road, which did not include motive power or the use of vehicles. Its schedule of tolls ran from one penny per ton per mile for limestone to threepence for cotton, wool, and manufactured goods. Traces of the old provisions concerning tolls are still to be found in the English railway acts, and to this day French railway concessions distinguish between the toll (*droit de peage*) and the charge for carriage (*prix de transport*).

While it might have been possible for independent carriers to furnish cars for the transportation of goods upon the railroad — as was sometimes done in this country in the case of the fast freight lines, and is still done in England by the coal companies — it was quite a different matter to obtain the motive power. A locomotive was beyond both the means and needs of most carriers and shippers. Trains run by different managements upon the same road would be dangerous. Independent carriers could not serve the public with facility nor without duplication of expense. Safety, convenience, and economy soon compelled the railroad to operate its own road. It became a carrier as well as a toll owner. The functions, though distinct, could not be separated.

The railroad, as a toll owner, is still concerned

with the principle of the value of the freight which formed the basis of the old canal tariffs. It endeavors especially to obtain a return upon the capital invested in the road. The railroad, as a carrier, is interested in the bulk of the goods, the method of packing, the risk, and other matters affecting the cost of carriage. It seeks compensation for the particular service rendered. The railroad *rate* includes both the toll and the charge for carriage.

Cost to the carrier and value to the shipper were the elements which determined the rate in the earliest days of railroads. The practice of basing rates upon these factors which then began has been followed ever since. But whether rates are properly so made depends upon principle rather than practice, however well the origin and development of the practice may serve to illustrate the application of the principle. And we shall later see that the practice is well founded upon principle — that cost and value must, theoretically and practically, fix the rate.

Railroad a fixed investment.

The construction of a railroad involves a large outlay of money. Preliminary surveys are necessary. Lands are required for road-bed, sidings, stations, and approaches. Hills must be cut down and embankments raised. Bridges, viaducts, and tunnels are needed. Stations, engine houses, and other structures must be erected. All the costly works of a railroad must be completed

and paid for. A transportation plant represents a large investment of capital. It is capable of furnishing transportation and nothing besides.

If there be no traffic for a railroad it is worthless. It cannot be used for any other purpose. Its roadbed is good for a railroad and nothing else. Its lands have been ruined for other purposes by cutting down or raising up. Its stations and engine houses are adapted only for a special use. The works of an abandoned railroad are of no value where they are, and they cannot be moved. They represent an investment which is lost — money thrown away.

When a manufacturing or mercantile establishment becomes unprofitable it may be shut down or its operations limited. Capital invested may largely be withdrawn and invested elsewhere. But when a railroad commences operations it cannot stop, and there is no object in limiting operations. As we shall see, the greater the operations at any profit the greater the chance of success. When a railroad cannot earn dividends it must run to earn fixed charges. When it cannot earn fixed charges it must run if it can earn operating expenses, in the hope of future improvement.

These principles enter into railroad competition and affect charges. The bankrupt railroad must have traffic. To obtain business it cuts rates quicker and deeper than its prosperous competitors. Rates which return any profit may be acceptable if no greater can be obtained. However small the

profit may be it helps preserve the permanent investment. Rates which return no profit at all, and barely meet the out-of-pocket expense, may be justifiable if they give the fixed investment a chance for the future.

Railroad expenses largely independent of traffic.

A railroad represents not only a large fixed investment, but an investment which must practically all be made before any income can be obtained. There is no way to make certain in advance that the road will be successful or even that its expenditures will not exceed its receipts. Road-bed, bridges, and tunnels must be completed before the rails are laid. Stations, sidings, and signals must be provided before the trains are run. And there can be no trains to run until the rolling stock is purchased. A railroad must be constructed and equipped to conform to the minimum standard of usefulness — ability to carry passengers and freight in safety and with reasonable despatch — before it opens for traffic. It must commence operations before it can earn any revenue. It cannot know what the revenue will be until it begins. Just as the site must be acquired, the specialized building erected, the scenery supplied, the actors engaged, before the doors of the theatre are opened, and just as the play must go on whether the audience be large or small, so the railroad must be completed before it can begin to carry freight, and must continue to operate whether its business be heavy or light. But unlike the theatre which may terminate expenses

— except for maintenance — by temporarily closing its doors, the great bulk of railroad expenditures goes on irrespective of revenue coming in. And this brings out the essential fact — underlying many phases of the subject of rates — that *the expenses of a railroad are largely independent of the amount of traffic*. Stated in another way, the outgo of a railroad has little relation to its income.

Railroad expenses as distinguished from dividend payments — the division of profits — are customarily divided into two general classes:

(1) Fixed charges.

(2) Operating expenses.

These expenditures, considered especially in their relation to the traffic, may also be separated into

(A) Constant and invariable expenses.

(B) Fluctuating and variable expenses.

These divisions proceed along very different lines. All the items of fixed charges are constant, but the outgoings for operating expenses are not all variable. Constant expenses are independent of the amount of business transacted. Profits may disappear, traffic may fall away, but the constant expenses must be paid. They are always with the railroad. Fluctuating expenses, on the other hand, vary with the business. They depend upon the amount of the traffic.

Fixed charges are the necessary payments for interest upon the funded and floating debts, taxes and rentals, and for the sinking fund, if there be one.

While the proportion of fixed charges to operating expenses varies with the railroad, an average of all the railroads in the United States for the last five years shows that the fixed charges amount to about twenty-five per cent of the entire outgoings. This percentage has steadily decreased in recent years owing to the refunding of bonds at lower rates of interest and the reduction of bonded indebtedness through re-organizations and the substitution of stock issues. But while the proportion is reduced, fixed charges still represent a constant expense amounting to one quarter of all the expenses of the railroad — an obligation which must in any event be discharged if the railroad is to remain solvent.

Operating expenses are separated in official accounts under four heads:

(1) General expenses.
(2) Maintenance of way and structures.
(3) Maintenance of equipment.
(4) Conducting transportation.

General expenses represent expenditures made for the benefit of the service as a whole and not for any particular department. All administrative expenses, — the salaries of executive officers and their subordinates, the cost of auditing the accounts and keeping the books, and of receiving, caring for, and disbursing the funds, — the law expenses, the insurance fund, if any be created, and other items of expenditures not incurred for any special part of the work of operation, are included in the general

expenses. These expenses are only slightly affected by changes in traffic. The auditor can check the accounts with but little more work if the business be greatly increased. The treasurer will hardly find his labors diminished if the traffic fall off materially. Legal expenses are quite independent of the amount of business. In fact, general expenses may fairly be treated as wholly constant expenses. They constitute a comparatively small item — amounting to about three per cent of the total expenditures of the average railroad. The larger the railroad the less, proportionally, the general charges.

Maintenance of way and structures requires a considerable portion of railroad disbursements. The amount per mile varies with the railroad. The road having heavy traffic may be obliged to expend several times as much for maintenance as the road having only a light business. Heavy hauling wears out the rails and road-bed. But the very density of the traffic makes the cost per unit of traffic — the hauling of one ton one mile — much less for the former road than for the latter. The road having the largest business can afford to spend the most to maintain its plant. Taking all the railroads of the United States as one system, the cost of maintenance of way and structures is about sixteen per cent of the total expenditures. But railroad stations and other buildings do not wear out. Painting and repairs are necessary to make good the effects of wind and weather. Bridges and other structures may become

out-of-date and be superseded, but they are rusted and weatherworn and not worn by use. The ties in the road-bed rot and the earth ballast is washed away. Only the rails are worn out by traffic. The buildings, bridges, and other structures must be preserved from the weather whether the traffic of the railroad be heavy or light. The rotten ties must be replaced whether the trains be many or few. The need of keeping the road-bed supplied with ballast does not depend upon the road's business, however much attention the ballast may require, when supplied, on account of the continual jar of trains. Expenditures for repairing bridges and structures, supplying ties and ballast and the like are, therefore, constant expenses. On the other hand, disbursements for obtaining and laying new rails and keeping the tracks in alignment and proper order are variable and fluctuating, although even these expenses are not entirely dependent upon the amount of business done. Half loaded trains wear out rails nearly as rapidly as loaded ones. On the whole it may be said — using statistics as a basis — that of the sixteen per cent of the total expenditure required for maintenance of way and structures five-eighths — or ten per cent of the total — represent constant expenses, and the remainder — six per cent — fluctuating expenses.

Another important class of railroad expenditures is for maintenance of equipment, which absorbs about fourteen per cent of the total outgoings of the

average railroad. The principal component items as stated in railroad accounts are

(1) Repairs and renewals of locomotives.

(2) Repairs and renewals of passenger cars.

(3) Repairs and renewals of freight cars.

(4) Repairs and renewals of shop machinery and tools.

(5) Superintendence.

Repairs and renewals of locomotives and of freight cars are by far the largest items, taking together three-quarters of this class of expense. The joining of "renewals" and "repairs" is significant of the fact that part of the expense of maintenance of equipment is constant. Rolling stock generally needs repairs because it is worn by use. The cost of wear and tear increases with the use. Every mile of travel takes something — though infinitesimal — off the value of a car or engine. *Repairs* of rolling stock vary largely with the traffic. Still, a car is worn out just as much by carrying a half load as a whole load. An engine will deteriorate little more from hauling a heavy than a light train. *Renewals* of rolling stock are more independent of the work done. Locomotives and cars are replaced by new ones quite as much because they become antiquated and out-of-date as because they are worn out. But the substitution of improved rolling stock for that which has merely become obsolete, has little relation to the amount of traffic. Improved cars and engines may be more needed to attract business when traffic

is light than to deal with it when heavy. On the whole, it is probably not unfair to apportion expenditures for maintenance of equipment equally between constant and fluctuating expenses.

Conducting transportation — doing the work — may be divided broadly into

(1) Station expenses.

(2) Movement expenses.

Station expenses include the cost of station service and supplies, of switchmen, flagmen, and watchmen, of signalling, and similar items. These expenses are practically constant. The men must be kept however light the traffic may be, and, up to a definite limit, they will be able without assistance to attend to an increase of business. Beyond such a limit an increased business will necessitate the employment of more men.

Movement expenses, including the wages of engineers and roundhousemen, the cost of fuel and water for locomotives, of the train service and train supplies, and expenses of a similar nature are variable. They depend upon the amount of the work done. The more freight to be moved the greater the expense of moving it. Movement expenses fluctuate with the amount of business, although even here we may notice that while in a broad way a reduction of traffic will compel a reduction in the number of trains, the expenses for engine and train service upon a particular train will be the same whether it be empty or full.

Conducting transportation upon the average rail-

road in the United States in recent years takes about forty-two per cent of the total expenditures; of which, roughly speaking, one-third may be allotted to constant, and two-thirds to fluctuating expenses.

Using this examination of the outgoings of a railroad as a basis, we may prepare a table separating expenditures into those which are constant and those which are fluctuating. The following table so arranges the figures already obtained but, like the figures themselves, is rather an illustration of the principles involved than a statement of technical accuracy:

Class of Expenditure.	Proportion of Constant Expenses to Total Expenditures.	Proportion of Fluctuating Expenses to Total Expenditures.
Fixed Charges.	25	
General Expenses.	3	
Maintenance of Way and Structures.	10	6
Maintenance of Equipment.	7	7
Conducting Transportation.	14	28
	59 +	41 = 100

The conclusion therefore follows, that a clear majority of the expenses of a railroad are independent of the amount of its traffic. This is fundamental.

Here is a corollary to the conclusion just reached: *The expenses of a railroad are not apportionable to different items of traffic.* As expenditures have no certain relation to business done, they largely constitute joint and not separable cost. With the exception of a small portion of the disburse-

Joint cost.

ments, which may be broadly divided between passengers and freight, most of the outgoings of a railroad are for the benefit of the service as a whole and not for any part of it.

Fixed charges manifestly are not apportionable. Expenditures for maintenance of way and equipment, with the exception of the small amount spent upon passenger stations or freight houses, cannot even be allocated to freight or passenger traffic — much less to any particular item of traffic. Expenses for maintenance of equipment may to a limited extent be apportioned between the freight and passenger service, but no further. Expenditures for conducting transportation may also, through a dissection of accounts, be assigned in large measure to either freight or passenger traffic, but the apportionment ends there. Attempts to apportion expenses to passengers and freight according to train mileage rest upon an entirely arbitrary basis.

Even if it were possible to allot *all* expenses to the passenger and freight traffic respectively we should only meet the *impasse* of joint costs a little later. Considering the freight service by itself — and the same is true of the passenger service — the energy is expended with reference to the work as a whole, and not with regard to any particular part. The constant expenses are absolutely non-apportionable. The fluctuating expenses are in great part incapable of separation, and those which may be dissected can only be apportioned with the greatest

difficulty. The transportation of any article involves the use of terminal facilities, road-bed, and train, and the service of many different departments. Expenditures to meet these expenses — joint costs — are not assignable to any part of the traffic.[1]

Even in the case of a single freight train there is a large element of joint cost. While it might be possible to determine the out-of-pocket expense of running the whole train a stated distance, it would be utterly impracticable to calculate the expense of transporting any particular part of the goods upon the train. There would be one joint cost for the whole train load, and it would ordinarily be difficult to show that any single item cost anything at all. Only in the case of a train loaded with a single article, *e. g.* coal, would it be possible even to approximate the cost per ton mile, and the cost so determined would only represent the money out of pocket.

We shall later see how joint costs necessarily affect the making of rates.

Here is another corollary to the conclusion that the expenditures of a railroad are largely independent of the amount of its traffic: *When constant expenses have been paid, additional business shows an enhanced percentage of profit.* The

Law of increasing returns.

[1] Returning to the canal again we find a perfect illustration of an establishment furnishing various services at joint cost. With the exception of the small expenditures for maintenance and supervision the only expense is interest on the permanent investment. All expenses are for the benefit of the traffic as a whole and go on whether the business be heavy or light.

total cost does not increase in proportion to the increase in the volume of business. Conversely, the net income increases more rapidly than the business expands. A railroad is subject to the "law of increasing returns" — the principle that increase in the production of an industry within the capacity of the plant results — prices remaining the same — in an increased ratio of profit upon the capital.

A railroad is seldom operated to the extent of its capacity. Its cars, tracks, and locomotives are generally capable of greater service. Traffic up to a certain point pays the constant expenses. Beyond that point, and up to the capacity of the road and its equipment, the cost to the railroad company is only the expense which varies with the traffic. We have seen that the constant expenses of a railroad are more than half the total expenditures. If, therefore, — as shown by Mr. Acworth[1] — "it costs x to deal with 1,000,000 units of traffic, 5,000,000 units will cost, not 5 x, but $\frac{1}{2}$ x + ($\frac{1}{2}$ x × 5) = 3 x."

Increase in business enables the railroad to charge lower rates. An expanding volume of traffic may profitably be carried at continually lowering prices until the capacity of the railroad and equipment be reached. But when the increased business necessitates additional facilities it may cost more than it is worth. The single track road may operate to its maximum with increasing profit. The expense of

[1] *The Elements of Railway Economics.* By W. M. Acworth. London, 1905, p. 50. An admirable little book of high authority.

laying another track may entail more in interest charges than the increased business will pay.

Declining rates from outside causes — competition or business conditions — may more than offset the benefit of the law of increasing returns. While an increased business may be handled more economically per unit of traffic, and, in consequence, a railroad be enabled to reduce its charges to the extent permitted by the saving in expense, it can seldom submit to a larger reduction without loss. If it make a greater reduction it may be ruined not only in the face of, but on account of, a constantly increasing traffic. The more business done at a loss the greater the loss.

The converse of the proposition, that an increase in the business of a railroad makes for lower rates, is also true. Reduced rates stimulate traffic. The lower the charge the more business. But the extent to which traffic may be developed by the most radical reductions in rates is limited. In the case of very valuable articles the freight is proportionally such an inconsiderable item that a reduction has little effect upon their movement. In the case of articles already in very general use — the necessaries of life — only a limited increased demand could be expected if rates were made nominal. And this is not all. The possible traffic from a given territory is limited by its productivity. The railroad cannot carry more grain from the Western station than the surrounding district will produce, if it carry it for nothing. Re-

gardless of rates, no more ore can be obtained from the mining town than the mines will yield. Moreover, productivity limits incoming as well as outgoing shipments. The farmer cannot buy more dry goods than his grain will pay for, no matter how cheaply they may be carried. Rate reductions may have far greater effect upon one road than another, depending upon the *potential* traffic. Nothing will be gained by reducing rates unless there is something to be gained.

A railroad is an *economic* monopoly in many places.[1] Most localities have only a single line and are without water communication. Here there is no such thing as competition. The possibility of building a parallel line is of little benefit to the shipper. If not a capitalist he cannot build, and if he is, the building proposition is likely to be unattractive. Traffic sufficient to enable one railroad to pay large dividends may not be

Railroad as a monopoly.

[1] "John Stuart Mill long ago called attention to what we may call economic or industrial monopolies where competition is neither illegal nor shut out by nature, but where it is shown to be practically inefficient and undesirable. . . . Certain characteristics are common to them all. The industry demands a large amount of capital; it supplies a necessary of life; the article furnished is local; the industry occupies a peculiarly favorable situation; the methods of operation require unity and harmony of management; the production can be largely increased without a proportional amount of capital. This is true not only of docks, water-works, and gas-works, but of all media of transportation — turnpikes, canals, telegraphs, post and railways." From a most valuable article by Professor E. R. A. Seligman, entitled "Railway Tariffs and the Interstate Commerce Law," in *Political Science Quarterly*, 1887, Vol. II.

enough for two to make any dividends. Moreover, a new road can compete with difficulty with an established line. As we have seen, the more business a railroad does the cheaper it can do it. The old road with two or four tracks and large tonnage can make lower rates than the single track road with small tonnage.

A railroad is a *partial* monopoly in places having a single road and water communication. The water route can reach few places directly, and often necessitates transshipment and delay. It seldom gives the shipper precisely the service he desires. A railroad is a *part of* an economic monopoly where there are several railroads which unite in a division of the business.

A railroad is a *practical* monopoly, from the point of view of the small shipper, even in those places where there are competing roads. He is not in a position to bargain. He cannot deal on even terms. He must pay the rate charged by *one* of the railroads or not ship his goods.

Now while monopoly is the opposite of competition, and while without competition the laws of trade cannot operate, it does not follow that a railroad monopoly is injurious to the public. Industrial competition tends to low and equal prices. Railroad competition, as we shall later see, generally tends to discrimination and unequal rates. Railroad monopoly — its opposite — ought to lead to low as well as equal rates, and this because the rail-

road is subject to the law of increasing returns. If one railroad between two cities be able to attend to all present traffic and have room for more, how is the public benefited by the construction of another road? One road, with the increasing profits attending an increased business, should either give the public better facilities or lower charges. If it will not do so voluntarily it should be compelled to do so by public authority. Two roads dividing the traffic may be obliged to keep up charges and economize in facilities in order to make anything at all. The railroad should be recognized as a monopoly and treated as such.

A monopoly under governmental supervision may better promote the public interest than the freest competition. But it must be closely watched. How closely, is the important question. Governmental regulation cannot become governmental control without a shifting of responsibilities.

CHAPTER II

LIMITATIONS OF RATES

THE obligations of a railroad, and the economic principles governing its business set limits to the charges which it may make. Limitations apply to rates collectively and individually — to tariffs and separate charges. A railroad is entitled to receive from all the rates together enough to pay expenses and a fair return upon capital invested. It is not entitled to receive more because it is fulfilling a public function. And because it is fulfilling a public function each and every charge it makes must be reasonable.

A railroad has the right to adopt a schedule of rates which will produce sufficient revenue to afford a reasonable return upon the value of its property. The stockholders and bondholders who furnished the means for building the road cannot be deprived of a just reward for their enterprise. A law having that effect would be unconstitutional. A tariff is reasonable which will produce in the aggregate a fair return upon the value of the railroad property. Economically, a railroad should not charge more. Legally, it cannot be required to accept less.[1]

Tariffs should afford fair return upon capital.

[1] See Chap. IX.

In determining the value of the property of a railroad upon which it is entitled to a fair return, the matters to be given weight are

(1) The original cost of construction.

(2) The amount expended for permanent improvements.

(3) The estimated expense of duplication.

(4) The par and market values of stocks and bonds.[1]

The original cost *plus* the amount spent for improvements theoretically represents the cost of the road. But while both elements are to be considered in ascertaining the value of the property they do not necessarily reveal its true worth. Some railroads have been economically built and honestly managed. Others have been extravagantly constructed and inefficiently controlled. Some were built when wages and materials were high and some when they were low. Cost alone is no criterion of value. If applied as a standard it would generally make the result too small, because railroad accounts rarely show all the earnings spent in construction.

The cost of reproduction has sometimes been taken to represent the value of a railroad. In theory it does represent actual value. The difficulty, however, with basing value upon the estimated cost of duplication, arises from the practical impossibility of estimating the "incidentals" — an item of importance in large undertakings. Making

[1] See the Nebraska Rate Case, 169 U. S. Rep. 546.

cost of reproduction the criterion of value would almost necessarily produce a result unfairly low.

If stocks were not watered and capitalization fairly represented money invested, the par value of the outstanding stocks and bonds of a railroad would fairly represent original cost and the expense of improvements not met from earnings. A convenient basis for ascertaining value would be furnished. But stocks are watered. Anticipated profits are capitalized in advance. A large volume of securities is deemed desirable for speculative purposes. Fictitious capitalization, however, is not an element of value, and the amount of outstanding stocks and bonds is seldom a true measure of worth. A railroad cannot by the manufacture of paper securities impose upon the public the burden of making them pay real profits.

The market, rather than the par, value of the securities of a railroad measures the value of its property. Property ordinarily is worth what it will sell for. The prices of a railroad stock, however, fluctuate so widely with speculative movements that it is difficult to say that the price at any one time represents true value. Average prices are better. The mean market prices of railroad securities for a substantial period furnish the only indication of the value of railroad property, available in the absence of the most searching examination.

The earning capacity of a railroad fairly indicates its value for many purposes. Property is often

rated according to what it brings in. But earning capacity cannot determine the value of the property of a railroad upon which its rates must make a fair return. Earnings are dependent upon rates, and value indicated by earnings manifestly has no relation to the reasonableness of rates. Otherwise, the more the railroad charged and thereby earned, the more it would have the right to charge.

What the fair return is which a railroad is entitled to receive cannot be determined by the application of any fixed standard. It must vary with the period and with the conditions. It should be sufficient and only sufficient to lead to the continued investment of capital in railroads. Rates should be so adjusted that the total revenue produced by them will compensate the railroad to the extent that the same amount of energy expended in other branches of productive industry is compensated.

But all this has very little to do with particular charges. The value of the railroad property is only important in determining the reasonableness of an entire schedule of rates, — an inquiry which can hardly arise except when a law-made tariff is attacked as being confiscatory and, therefore, unconstitutional. The value of the property is a most remote consideration in fixing an individual rate. While each shipment should undoubtedly produce its x-millionth part of the revenue required from all shipments, x is an unknown and unknowable quantity. It would be impossible to fix even the maxi-

mum or minimum of individual rates in any such way. In the long run the schedule should bring in a fair return upon capital invested, but the necessity for such return has practically no effect upon the charge for the particular service. We must look for other factors to determine the individual charge.

Maximum and minimum of charges.

Individual rates have a maximum and minimum fixed by two principles:

(1) A charge for any transportation service cannot exceed the value added by that service.[1]

(2) A charge for any transportation service cannot go below the expense which would not have been incurred had the service not been rendered.

The value added by the service necessarily fixes the maximum rate. When commodities have a market value in one locality greater than in another the value to the shipper of transporting them from the one place to the other is the difference in price. Transportation creates value to the extent of the difference. A charge, however, which is greater than the value created will stop shipments.

The principle of value created by transportation is clearer in the statement than in the illustration, on account of an apparent transposition of cause and effect. The market price of a bushel of wheat

[1] The phrase "value of service" as used with respect to railroad charges has two shades of meaning. In an exact sense, it expresses the value created by the transportation service. In a broader sense — and including the narrower meaning — it embodies the principle that ability to pay a rate measures the value of the service of earning the rate. We shall later fully consider the value principle in rate making.

may be a dollar in New York and ninety cents in Chicago, but this difference is caused by the charge of ten cents per bushel for transportation from Chicago to New York. The difference in price does not produce the rate. The rate produces the difference in price. Raising the rate will not stop shipments but will raise the New York price. But this is only true because Chicago supplies New York with wheat. If the price through raising the rate should be made so high as to attract wheat from other world markets, the value which could be added by the transportation service would be definitely marked and the rate definitely limited. To illustrate further: If the rate from Chicago added to the price there fix the price of a bushel of wheat in New York at a dollar, a wheat grower in the South West, who can get eighty cents per bushel for his wheat for shipment to Europe by way of Galveston, cannot afford to pay more than twenty cents a bushel to ship to New York. If the railroad desire the business it must meet the value of the service with the rate.

While the principle that the maximum charge for any service is the value added by it is more readily applicable in the case of commodities which have regular market prices, it is of general application. No man will pay more for any service — transportation or otherwise — than it is worth to him. Traffic cannot be charged beyond its ability to pay. If it is it will not move. The difference

between the worth of the service and the charge measures the inducement to shipments.

The out-of-pocket expense fixes the minimum charge. A rate cannot be made lower than the additional cost of rendering the particular service. The extra outlay must be compensated for or the railroad will be the loser by doing the work. A railroad may cut rates to develop business, but it must obtain from each item of traffic at least sufficient to pay the expenses which would not have been incurred had that traffic not been handled. No conditions can justify a lower charge. But it is urged that losing rates are defensible when given temporarily in order to stimulate industries and build up paying business at particular localities — that future profits may more than offset present losses. This might be true if the railroad carried on a strictly private business. It could take such hazards as it saw fit. But, while it may do business without profit, its public obligations forbid it to impose upon one locality the burden of making up the actual losses sustained in favoring another. It cannot speculate at the expense of the public.

The maximum rate, therefore, is fixed by what the shipper can afford to pay; the minimum, by what the railroad can afford to carry for. But these limits are wide apart. Where between the two extremes the particular rate shall be placed depends upon many circumstances. In a general way it may be governed by the policy of the railroad. One

management may believe that low rates develop business, and seek for small profits on a heavy traffic; another may consider it expedient to obtain as much as possible from the business offered. But there is no standard to which a rate must conform except that it must be reasonable.

Rates must be reasonable.

As we have seen, a railroad company, regarded either as a *quasi*-public corporation or a common carrier, is under public obligations. It cannot fix its rates solely with a view to its own interests and without regard to the rights of the public. Stockholders are not the only persons to be considered. The public cannot be subjected to unjust charges that dividends may be earned. But, while a railroad cannot ignore the rights of the public and exact charges excessively high, it is equally true that the public have no right to insist that charges shall be excessively low. The railroad is entitled to just compensation for services rendered. Its stockholders cannot be deprived of a fair return upon their investment. Under the common law and independent of statute rates must be reasonable.

The provision in the first section of the Interstate Commerce Act that "all charges made for any service rendered or to be rendered in the transportation of passengers or property . . . shall be reasonable and just," is merely declaratory of the common law.[1]

[1] Maximum Rate Case, 167 U. S. Rep. 501.

It is the duty of the courts to enforce the common-law requirement that charges for transportation shall be reasonable. The reasonableness of a rate presents a judicial question, although necessarily a question of fact. The courts must decide when the question is presented what is reasonable in the matter of rates, just as they determine as a fact what is reasonable in other controversies. The problem is difficult. The reasonableness of a railroad charge involves many considerations and is affected by many circumstances and conditions. But while changed conditions have made it infinitely more complicated, the real question is the same as that presented two hundred years ago, when the shipper complained that the wagon carrier had made an unreasonable charge. The difference is not in the question but in the difficulty of answering it.

A shipper may maintain an action at common law for the recovery of the amount paid in excess of a reasonable charge. But this remedy is entirely ineffectual and inadequate. The amount wrongfully exacted from an individual shipper would ordinarily be so small that he would rather lose it than enter into an expensive and protracted lawsuit for its recovery, and at the same time incur the ill-will of the railroad. And if he brought suit and won his case little would be accomplished for the future. A more efficient remedy is clearly demanded. A method should be provided by which shippers could apply to the courts and, with little delay and possibly

at the public expense, obtain injunctions against unreasonable charges. This might possibly require legislative action enlarging the equity powers of the courts. It is made necessary by the relation of the railroad to the shipper and the comparative helplessness of the latter. This remedy should be provided irrespective of the question whether unreasonable charges are common or uncommon, or whether federal regulation is expedient. The mere existence of an effectual remedy may make resort to it unnecessary. The courts cannot, however, be authorized when they find a rate to be unreasonable to go further and determine what rate would be reasonable, and enjoin the collection of more than that. This would amount to making future rates, and, as we shall see, the rate-making power is legislative, not judicial.[1]

The rule that rates must be reasonable has always been recognized. The difficulty lies in framing a standard of reasonableness.[2] With respect to an

[1] See Chaps. IX. and X.

[2] In the Trans-Missouri Freight Ass'n case, 166 U. S. Rep. 331, the United States Supreme Court said: "What is a proper standard by which to judge the fact of reasonable rates? Must the rate be so high as to enable the return for the whole business done to amount to a sum sufficient to afford the shareholder a fair and reasonable profit upon his investment? If so, what is a fair and reasonable profit? That depends sometimes upon the risk incurred, and the rate itself differs in different localities: which is the one to which reference is to be made as the standard? Or is the reasonableness of the profit to be limited to a fair return upon the capital that would have been sufficient to build and equip the road, if honestly expended? Or is still another standard to be created, and the reasonableness of the charges tried by the cost of the carriage of the article and a reasonable profit allowed on

entire rate schedule we may say — as already shown — that that is a reasonable schedule which returns in the aggregate enough — but not more than enough — to afford the capital invested in the railroad a return equal to that received by capital invested in productive enterprises generally. Theoretically, the rate for a particular service should be an infinitesimal proportion of the amount required for all services. But this is mere theory — impossible of application. It cannot be said that there is any definite rule for determining the reasonableness of an individual rate. Rates are not made upon a scientific basis. Who can determine — standing by itself — whether a dollar is a more or less reasonable charge for a particular service than ninety-five cents?

Still the courts and railroad officials are not driven to mere guesswork. A negative rule may at least be stated. No rate is reasonable unless based upon

(1) The cost of the service.

(2) The value of the service.

The problem is to obtain a positive rate by following a negative rule — to make a certainty from an uncertainty. We shall see that the problem can in practice only be solved by *comparison.*

that? And in such case would contribution to a sinking fund to make repairs upon the road-bed and renewal of cars, etc., be assumed as a proper item? Or is the reasonableness of the charge to be tested by reference to the charges for the transportation of the same kind of property made by other roads similarly situated? . . . It is quite apparent, therefore, that it is exceedingly difficult to formulate even the terms of the rule itself which should govern in the matter of determining what would be reasonable rates for transportation."

CHAPTER III

MAKING RATES

SINCE the earliest days railroad rates have included the charge of the carrier and the toll of the toll owner. The charge represents the cost of the service; the toll, the value of the service. The result of any correct practice must be reasonable rates. Any other result indicates a wrong practice. We have examined the origin and development of the practice, have learned the result to be attained, and have gone so far as to lay down a negative rule. Let us now see whether the long established practice *is* based upon correct principles; whether it does produce reasonable rates, and by whom rates should be made.

Cost of service.

The phrase "cost of service" as used in relation to railroad rates has three meanings:

(1) The actual outlay required to move the particular item of traffic.

(2) The expenses of the railroad in moving its freight over a completed and equipped road; of which the particular item of traffic should bear its proportional share.

(3) The entire expenses of the railroad, including interest and a fair return upon capital invested; of which the particular item of traffic should bear its proportional share.

I. The additional expense incurred in rendering the particular service — cost of service in its narrowest sense — determines the minimum charge and is consequently an element in fixing the rate. It is always important to ascertain the amount of tare — the proportion of dead to paying freight. Freight carried in half empty cars costs more than full loads. It is equally of consequence to know whether the cars can be returned loaded or must return empty. Other considerations which to a greater or less degree affect the actual expense to the railroad of moving the particular freight, and consequently enter into the rate, are (a) the bulk of the goods transported; (b) the weight; (c) the method of packing and protection; (d) the extent of the shipment and whether in car-load lots; (e) the kind of cars required; (f) the necessary speed, and (g) the necessity for ice or heat.[1] Mileage, of course, is also a most important factor.

II. Cost of service in a broader sense is synonymous with "moving the freight." It includes the outlay of the railroad in carrying its freight over a completed and equipped road, embracing expenditures for fuel, wages of freight agents, freight handlers,

[1] Risk is always an element to be considered in making rates. Articles which are dangerous and destructive or perishable and destructible must pay a higher rate than articles of a less dangerous or perishable nature. It may, however, cost the railroad little more to carry the former than the latter. In so far as risk involves additional care and expense it is an element of cost of service. In so far as it makes the service worth more it is an element of value of service.

and men working freight trains, and for keeping the freight equipment in repair. It also takes in such proportion of all the other expenses, outside of fixed charges, as the amount of freight traffic bears to the whole traffic of the railroad. Now if we could determine the total freight expense we would only have to divide it by the total freight reduced to ton-miles to get the average cost of freight transportation per ton-mile. A basis for making rates might be indicated. The insurmountable difficulty, however, is that we cannot ascertain the proportion of expenses which should be allotted to the freight traffic. As we have seen, most of the expenses of a railroad are not apportionable. And even if an arbitrary result could be obtained by using train mileage as a basis, it would furnish no foundation for making particular charges.

III. Cost of service in its broadest sense includes not only all the outlay for "moving the freight," but also the freight traffic's proportional share of the interest upon the railroad debt and of a fair return upon the capital invested. Rates in the aggregate should be sufficient to meet this cost, which is only another way of saying that a railroad is entitled to a fair return upon the value of its property. The freight service should pay its proper share. But as we have seen, the results required from rates collectively are of little aid in making rates individually, even if it were possible to ascertain the freight service's proper share.

While cost is always a factor in rate-making, it is a popular idea that it should go much further — that rates should be based upon the cost of service. It is an economic principle, it is said, that cost of production determines the selling price. The prices of the products of manufacture or agriculture are fixed by the cost of making or growing them. Transportation adds value to commodities by placing them where they are needed. It is a form of production. Cost of service is cost of production to a railroad. Therefore, it is urged, cost of service should determine the selling price of transportation — the rate.

Cost theory of rates.

The cost theory of rates is that charges for different transportation services should be regulated in accordance with the cost to the railroad of performing them — that rates for services should vary with the varying amounts of energy necessary to do them. Each shipment should bear its proportional share of the expense.

The primary difficulty with the cost theory is that it is wholly impracticable. The cost of a particular service cannot be ascertained. We have seen that joint costs represent a very large part of the expenses of a railroad. Energy is expended for the benefit of the service as a whole and not for any part of it. Constant expenses are absolutely, and fluctuating expenses partially, non-apportionable. The out-of-pocket cost of a particular service may be got at; but this cost is merely an element

entering into the rate. Any attempt to use these ascertainable expenses as a basis for estimating the whole cost of a service would merely end in conjecture. As said by General Alexander: "Results so arrived at would be as unreliable as the distance to the moon, estimated by measuring to the top of the highest mountain and guessing at the rest."[1] Basing rates wholly upon the cost of service is impossible because it is impossible to find out what the cost is.

The analogies by which it is sought to justify the cost theory may be carried too far. It is not always true that the prices of manufactured products are based upon the cost of production. Indeed, it is only the very smallest craftsman, who buys the material for his job and charges the amount paid and the usual wages for his labor, who bases his prices on cost and nothing else. Let us go up a little in the

[1] *Railway Practice.* By E. Porter Alexander. New York, 1887, p. 3; from which the following apt comparison is also taken:

"The case of a railroad's estimating the cost of doing a particular piece of business is not unlike that of a lawyer estimating the cost of giving an opinion. He has fitted himself for that particular business and, as it were, invested his life in the education and experience necessary to transact it. His time is good for nothing else, and if he is not called upon for opinions it will be worthless to him. He can, therefore, render opinions up to a certain limit almost without cost except for stationery. So a railroad is a large fixed investment capable of furnishing transportation and nothing else. Up to certain limits it can always take additional business without cost except for a very small amount of fuel. The money it receives for the new business above the small *additional cost* is all clear profit. It adds that much to the ability of the road to serve other patrons at low rates."

scale and take a manufacturer with a small plant, who makes but a single article, *e. g.* cloth. Here it would seem that prices could be based solely upon cost. It is true that such a manufacturer at the end of the year may divide his total expense, *plus* a fair profit, by the total number of yards produced, and determine the cost per yard — using the word "cost" in its broadest sense. But the cost is not determined until the goods are sold. It furnishes a basis for the prices for the year to come, not for that which has passed. And it can only be approximately correct as a basis for the future. Next year the proportion of expense to output may be very different from that expected. Still, in the case of small manufacturers with few lines, cost of production per ton or yard may be approximately determined, and may furnish a fair basis for prices. But how is it possible to ascertain the cost of production of any particular article in a large manufacturing establishment turning out many products? Such an undertaking, like the railroad, has its constant expenses. Its expenditures cannot be apportioned to particular parts of the output. Nearly all costs are joint costs. Prices cannot be based upon cost of production because there is no way of ascertaining what is the cost of producing one out of a hundred different articles. As a general rule, a manufacturer does not base his prices upon cost of production. After making sure of his out-of-pocket cost, he seeks to obtain from every sale just as much towards con-

stant expenses as it will stand. In manufacture and other forms of productive industry — except along the simplest lines — prices are rather based upon the worth of the article to the buyer than its cost to the seller.

Railroad rates based solely upon cost of service would not be stable. They could not be made in advance with precision because they could not be fixed until the amount of the traffic had been ascertained. And this is even more true than in the case of the manufacturer which we have noticed. Railroad cost varies inversely with the traffic. As the volume necessarily fluctuates, the cost based upon the volume must also vary. A schedule of rates established strictly upon cost of service would necessarily change as the business increased or decreased.[1]

If it were feasible to prepare a tariff based upon cost of service alone, the result would be unjust. Expense of transportation must largely be based upon the bulk of the article, and the cost principle would often impose the heaviest burden upon the cheapest goods. It costs a railroad more to transport a carload of coal a hundred miles than a carload of dry goods half the distance. But if the rate

[1] Upon the cost principle, the rate per ton-mile varies inversely with the traffic. Now it is equally true that the amount of traffic, to a certain extent, depends upon the rate. As already shown, low rates tend to increase business; high rates to restrict business. It therefore follows that the more business, the lower the rate; the lower the rate, the more business. There is a curious interaction of cause and effect.

were fixed solely on a basis of cost, the price of the coal would be made prohibitive. Moreover, high rates upon bulky articles of small value, such as lumber, coal, grain, and iron ore necessarily curtail production, and, consequently, reduce the amount of freight offered for transportation. If such rates were made by law, railroads would be absolutely prevented from building up communities along their lines through handling raw materials cheaply. They would be debarred from assisting — in the very way American railroads have been most potent in assisting — in the development of the country.

Analogous to the cost of service theory is that of equal mileage rates. It is sometimes claimed — more in the past than in the present — that the charge for carrying the same goods an equal distance should be everywhere the same. The claim — which at least has the merit of simplicity — may be said to take two forms, one broader than the other:

Equal mileage rates.

(1) That equal mileage rates should exist all over the country.

(2) That equal mileage rates should exist upon all parts of the same railroad.

Now it is at once apparent that equal mileage rates are not based upon cost of service. Terminal expenses — the cost of loading and unloading — are not affected in the slightest degree by distance. And if terminal expenses be separated, we come only a little nearer cost of service. The underlying prin-

ciples we have examined show clearly that cost of transportation does not vary in proportion to distance carried. It does not begin to cost twice as much to haul goods two hundred miles as one hundred. Mileage run is only one of the factors in cost of service.

But we make little progress in comparing mileage and cost theories. If both are untenable it does not matter that one is the antithesis of the other. Equal mileage rates must be considered by themselves. Equality is not always equity. Equal charges upon all the railroads in the country manifestly would be inequitable. Conditions both of roads and business are radically different. Cost of construction and operation varies widely. One road is built over the mountains and another across a prairie. The gradients upon the mountainous road may permit the hauling of less than half the trainload which the other road may readily move with the same power. The density of the traffic — a most important factor in railroad operations — also varies with the railroad. A road may be profitably operated at lower rates with heavy than with light traffic. Charges which would not support the railroad in New Mexico may make large profits for the road in New Jersey. And if we compare the physical conditions of the road across the flat country of New Jersey with those of the mountainous road in New Mexico, as well as the conditions of business, the injustice of equal mileage rates is the more apparent.

Equal mileage rates upon the same railroad stand upon the same basis as such rates upon different roads. Different divisions of the present railroad systems vary almost as widely in physical and commercial conditions as different independent roads. As long ago as 1874 Albert Fink said that "under the ordinary circumstances under which transportation service is generally performed the cost per ton-mile in some instances may not exceed *one-seventh of a cent*, and in others will be as high as *seventy-three* cents per ton-mile on the same road."[1]

The injustice of equal mileage rates both to the railroads and the shippers is very clearly shown in the report of the English Parliamentary Committee of 1872:

"The principle [of equal mileage rates] would prevent railway companies from making perfectly fair arrangements for carrying at a lower rate than usual goods brought in large and constant quantities, or for carrying for longer distances at a lower rate than for short distances.

"It would prevent railway companies from lowering their fares and rates so as to compete with traffic by sea, by canal, or by a shorter or otherwise cheaper railway, and would thus deprive the public of the benefit of competition and the company of a legitimate source of profit.

"It would compel a company to carry for the

[1] Annual Report of Louisville and Nashville Railroad for 1874.

same rate over a line which has been very expensive in construction, or which, from gradients or otherwise, is very expensive in working, at the same rates it carries over less expensive lines."

Equal mileage rates seem utterly out of the question. They would warrant very slight consideration were it not for the part which they have played in railroad history. The Granger tariffs in the Western States were largely based upon the equal mileage principle. This, with modifications for short distances, was the basis of the first Granger law passed in Michigan in 1871. The Potter law of 1874 in Wisconsin, the fixed-distance rate act in Iowa, and statutes in other States of the Middle West were along similar lines. They did not work because they were not workable and were soon repealed. The equal mileage principle may, however, still be traced in the German and several other European tariffs.[1]

Now, while *equal* mileage rates are clearly inequitable, rates upon a mileage basis are entirely just. Generally speaking it is worth more to carry goods a longer than a shorter distance. Every additional mile of carriage involves an additional service. But if rates per mile cannot be equal upon different roads or the same for different services, and if the necessary inequality cannot be based upon cost of service, upon what can it be based? We are driven to the answer, Value of the service.

[1] See Chap. VIII.

The value added by the service marks the maximum limit of rates. The value of the service affords a basis for making rates. Value in one way points out the bounds of extortion, and in another embodies the principle of concession. Rates are based upon the value of the service when they are based upon ability to pay. The principle of value adapts charge to worth. It is the principle of which the practice is "charging what the traffic will bear." Value of the service.

Basing rates upon the value of the service is largely the result of the operation of the element of joint cost in railroad expenses. As we have seen, the greater part of the expenditures of a railroad are made for the benefit of the service as a whole, and are not assignable to any part of the traffic. It is impossible to ascertain the cost of any particular service. But from all the traffic enough revenue must be obtained to pay charges and expenses and leave a fair return upon capital. How shall it be obtained?

In the first place, the revenue must be obtained where it *can* be obtained. Cheap goods have less ability to pay than dear goods. Different grades of traffic must necessarily pay different rates for the same service. The cost to the railroad of transporting articles of low value may be no less than the cost of carrying articles of equal bulk and weight of high value, but the charge for transportation must be less if the railroad is to obtain the business.

Cheap and bulky articles can be obtained for transportation only at low rates. They have not the ability to pay high charges. On the other hand, a high rate may be an inconsiderable item to articles of little bulk and great value, and will not deter their shipment. They have the ability to pay the rate. Charges for the transportation of coal, iron ore, grain, lumber, and other articles of little value compared with bulk must necessarily be at comparatively low rates. A high rate would be prohibitive. They could not afford to pay even the average rate. Dry goods, fine hardware, and similar articles can pay several times the rate upon lumber and coal and the volume of shipment be unaffected.

In the second place, from the railroad point of view, any service which pays a profit over the actual cost of performing it is worth doing. Any rate which returns a surplus over the expense of earning it is justifiable, although such rate if applied to the whole traffic would be ruinous. It is worth while to obtain even the smallest contribution toward fixed charges if the business can be obtained upon no other basis than the cheap rate, and other business will not be driven away by granting it. There may be said to be, therefore, three classes of freight with respect to the revenue produced:

(1) Cheap and bulky articles which pay little — but necessarily something — above the actual cost of moving them. These articles could not be carried at all if there were no other traffic. With other

traffic they help pay expenses. And as cost decreases with volume, traffic in these articles is worth developing. But they never pay their proportion of the joint costs.

(2) Articles of medium bulk and value which pay the expense of moving them and a fair profit besides. This class of articles pays its proportional share of joint costs and capital requirements, but nothing more.

(3) Articles of small bulk and high value which pay the expense of moving them and a high profit. This class of articles pays not only its own proportion of the joint costs and capital requirements, but makes up for the deficiencies of the articles in the first class.

Upon similar principles through traffic has not the ability to pay local rates. Shipments from a distance cannot be obtained at the rate justifiable for short hauls. A high rate per ton-mile may be an unimportant factor to a shipper who sends his goods only a short distance, while such a rate would wholly prevent the railroad from obtaining through traffic. The long-distance traffic corresponds to the cheap goods; the local traffic, to the dear goods. And the long-distance traffic, like the cheap goods, is worth having at a low rate, and is more profitable as its volume increases.

Competitive traffic stands upon the same basis as long-distance traffic. At points upon the railroad where there are rival carriers — water or rail — the

road must meet competitive rates to obtain competitive business. In order to meet these rates it may be necessary to reduce its charges to an extent which, if applied to its whole business, would throw the road into bankruptcy. There are only two alternatives. It may not compete. In this case non-competitive traffic must bear the entire expenses of the railroad. It may compete, and while the rates may be low, there will still be a small surplus which will help, so far as it goes, the non-competitive traffic to pay expenses. Competitive traffic, like cheap goods and long-distance traffic, cannot bear high rates.

The value of the service theory is beneficial both to the railroad and to the shipper. As we have seen, each ton of cheap and bulky goods and of through traffic, even if it cannot afford to pay average rates, pays something. It leaves a surplus, however small, available for joint costs. This traffic may be enormously increased by low rates. It cannot be obtained at all at high rates. The small returns may amount in the aggregate to large sums, and the indirect effect of low charges in developing business by building up communities along the line, and by reaching into new territories, may be immeasurable. Moreover, while the value principle is especially advantageous to those who ship cheap goods or ship long distances, it does not hurt and even helps other shippers. The shipper of the high priced article, and the shipper who has the advantage of location near the market, undoubtedly pay a higher propor-

tional rate than he who ships cheap goods, or ships them a long distance. But in the one case the rate is so inconsiderable in comparison with the value of the article, and in the other it amounts to so little for the short distance, that it does not affect the shipper's business. And the traffic which can stand high rates gains by every shipment at any profit of goods which can only stand low rates. Whatever surplus for joint costs is paid by cheap goods reduces to that extent the amount which must necessarily be raised from goods of high grade, and, consequently, lowers the rate upon such goods. The value of the service principle in making possible a low grade or through traffic aids the high grade or local traffic.[1]

[1] The development of the value of the service theory of rate making and the reasons upon which it is based, are clearly outlined in the Report of the Interstate Commerce Commission for 1887 (p. 30):

"It was very early in the history of railroads perceived that if these agencies of commerce were to accomplish the greatest practicable good, the charges for the transportation of different articles of freight could not be apportioned among such articles by reference to the cost of transporting them severally, for this, if the apportionment of cost were possible, would restrict within very narrow limits the commerce in articles whose bulk or weight was large as compared with their value.

"On the system of apportioning the charges strictly to the cost, some kinds of commerce which have been very useful to the country, and have tended greatly to bring its different sections into more intimate business and social relations, could never have grown to any considerable magnitude, and in some cases could not have existed at all, for the simple reason that the value at the place of delivery would not equal the purchase price with the transportation added. The traffic would thus be precluded, because the charge for carriage would be greater than it could bear. On the other hand, the rates for the carriage of articles which, within small bulk or weight concentrate great

It is, however, sometimes sought to justify the value principle upon untenable grounds. Thus it is said that charging according to the worth of the service is like making prices according to supply and demand. "The value of conveyance like the value of any other service is not necessarily what it costs, but what it is worth to him who wishes his goods carried. On supply and demand the available means for transport and the demand for it determine what it is worth while to give for carrying goods from A to B."[1] But this argument would justify *all* charges. Any rate would be warranted if shippers could be made to pay it. But railroad rates cannot be wholly based upon commercial principles. The railroad is not a private corporation but is engaged in a public business. It cannot justify unreasonable rates upon the ground that, being a monopoly and con-

value, would on that system of making them be absurdly low, — low when compared to the value of the article, and perhaps not less so when the comparison was with the value of the service in transporting them. It was, therefore, seen not to be unjust to apportion the whole cost of service among all the articles transported, upon a basis that should consider the relative value of the service more than the relative cost of carriage. Such method of apportionment would be best for the country, because it would enlarge commerce and extend communication; it would be best for the railroads because it would build up a large business, and it would not be unjust to property owners, who would thus be made to pay in some proportion to benefit received. Such a system of rate-making would in principle approximate taxation; the value of the article carried being the most important element in determining what should be paid upon it."

[1] *Railway Rates, English and Foreign.* By J. Grierson. London, 1886, p. 68.

trolling the supply, it can force the public to pay them. The public obligations of the railroad must always qualify the working of the value of service principle.

Charging for transportation services according to their value is analogous to taxation. Rates like taxes are based upon ability to pay. The analogy is especially close in the case of *ad valorem* duties. The power to make rates, however, unlike the power to levy taxes, is not of a compulsory nature. While the shipper must pay the charge if he make the shipment, he is not obliged to make it. Moreover, competition, where it exists, affects rates. Rates are not taxes; they are similar to taxes.[1]

[1] Professor Cohn in his able work (*Die Englische Eisenbahnpolitik der letzten zehn Jahre.* Leipzig, 1883, p. 65) states that railroad rates must necessarily be based not on the cost of the service but upon what the shipper can afford to pay and ought to pay for the service, and that, being so based, they are fundamentally like taxes; that basing a rate upon what the shipper *ought to pay* involves a question of ethics as well as economics; and that where determining the price of a service involves considerations of public policy and questions of right and wrong it cannot safely be left to private corporations. His conclusions are in favor of public ownership of railroads or at least public regulation of rates.

Making rates upon the value of service principle does not lead to *public ownership*. Rates have been so made since the earliest days of railroads, and the privately owned railroads making them have given the public the best and most economical service in the world. It is more difficult to show that charging according to ability to pay does not lead to *public regulation* of rates. It is still more difficult to show that it does not at least lead to *public supervision* and the correction of injustice where it is shown to exist. We shall recur to these questions later.

The phrase, "charging what the traffic will bear" — the application of the value of service principle — means charging what the shipper can afford to pay. There will be no shipments if the shipper is charged *more* than the service is worth to him. There will be no inducements to shipments if he is charged *all* the service is worth. There will be an inducement to continued shipments if he is charged *less* than it is worth. The question is what the shipper is able to pay not what he can be made to pay. Unfortunately this distinction is not thoroughly appreciated by the railroad officials themselves. Witness the well-known remark of M. Solacroup, director of the Orleans Company: "In the matter of transport tariffs there is only one rational rule, viz.: to ask of merchandise all it can pay; any other principle is no principle."

"Charging what the traffic will bear"

"Charging what the traffic will bear" is the system of making rates to develop business. It is rather an excuse for low rates upon cheap goods than for high rates upon dear goods. The traffic manager has solely in view the present and future revenues of his railroad. He adopts no fixed standard, but endeavors to ascertain what different classes of goods cost to produce, the demand for them, and their prices in different places, in order to determine what they are able to pay and whether lowering the rate will increase traffic. The method is necessarily so flexible and the result so elastic that "charging what

the traffic will bear" is sometimes said to be a mere haphazard estimate. In so far as it empowers railroad officials to fix rates according to their own judgment without other rule or practice than a desire to obtain for their companies all the revenues possible, present and prospective, it does confer a tremendous power. It is a power, however, always subject to the economic check that charging what the traffic will *not* bear cuts off business and affects the prosperity of the railroad. It cannot be too clearly borne in mind that charging what the traffic can bear is not charging what it cannot bear.

Whatever may be the objections to "charging what the traffic will bear," it is the only practicable method — due consideration being given to cost in determining the minimum — of making a rate and of obtaining and holding business. It has done much towards effective service and low rates. It has been many times abused and used as a means of extortion. But as a whole it has developed the country, has placed the burden of rates where it could be borne, and has reduced railroad charges to a point impossible upon the basis of cost of service alone.

Now, summarizing our examination we find that the value of the service theory — "charging what the traffic will bear" — necessarily involves two principles of the utmost importance in making rates:

(1) That the same service varies in value when rendered to different kinds of goods. The practical application of this principle necessitates *classification.*

(2) That the same service varies in value when rendered to different localities. The application of this principle involves *local discrimination.*

But before examining these resulting principles we should test those which we have already developed in an endeavor to ascertain (1) who should apply them, and (2) how they should be applied.

Who should make initial rates?

We have seen that the principle of basing rates upon the value of the service puts into the hands of the rate-making officials a power analogous to that of taxation. It has, therefore, been strongly urged by prominent writers that such a power — necessarily involving arbitrary distinctions directly affecting the public — can only be safely intrusted to public officials.[1] And, indeed, whatever consideration we give to the taxation analogy, it cannot be denied that the value principle is so flexible that it does confer vast power upon those who apply it. We safely reach the conclusion that cheap goods shall pay less for transportation than valuable goods — that the rate should be measured by ability to pay. But how *much* less shall the cheap goods pay than the dear goods? and what is the *difference* in ability? The limits within which the rate may be placed are wide apart, and there is great opportunity for friction between the shipper and the carrier. Now if the carrier — one of the interested parties — have the power to decide the matter in its own favor, and there

[1] See Professor Cohn's theory, *ante*, p. 53, note.

be no appeal, there is, at least, an opportunity for the abuse of power. The principle of value is just, but injustice may arise in the application of a just principle. It is elastic, but it may be stretched too far.

It is therefore said, that as the railroad is engaged in a business affecting the public, and as rates must be made upon a more or less arbitrary basis, the power to make them should be exercised by officials representing, not the interests of the railroad, but those of the nation. It is also pointed out that the State at present fixes the rates of other *quasi*-public corporations — street railway, gas, and similar public utility companies.

The question presented has two phases:

(1) Should initial rates be made by the government or the railroad?

(2) Should railroad-made rates be subject to governmental supervision and new rates made and substituted in place of those found unreasonable?

We shall consider the second phase of the inquiry at length in examining the subject of federal regulation of rates.[1] At present we are concerned only with the first and broader phase.

In the first place, we are not aided in our examination by the fact that statutory charges are made for public utility companies. Here the services rendered are all of the same nature, and the charges are, and ought to be, uniform. Cost of production is readily ascertained and as readily apportioned.

[1] See Chap. X.

Charges can be prescribed in advance by the legislature, with justice both to the corporation and to the public. But if there be any one thing which makes the value of the service principle desirable, both to the shipper and the railroad, it is its adaptability. Railroad tariffs cannot be made in the abstract and fixed in advance. Rates are innumerable and vary with conditions "Charging what the traffic will bear" requires the shippers and the traffic officials to keep in touch. Otherwise it is impossible to know what the traffic *will* bear. Flexibility in rate-making is absolutely essential to the development of business. Rates cannot be viewed singly. Every charge must be considered by itself and in its relations to other charges. A change in rates at one station may make corresponding changes necessary all along the line.

We see, therefore, in the second place, that the adjustment of rates upon the value principle is an intricate and complicated problem. If any commission or body of men — for example, the Interstate Commerce Commission — were appointed to make the tariffs covering the interstate traffic in this country, they could adopt one of two courses. They could — as some of the State commissions did when appointed to perform a similar duty — adopt the existing tariffs of the railroads, in which case they would serve no useful purpose. They could, on the other hand, attempt to make rates and changes in rates in the same manner in which the railroads

at present make them. Now there are in the United States over two hundred thousand miles of railroad, over one thousand operating companies, and literally millions of rates. Each railroad has its traffic manager and other officials dealing with rates. Not the least important of these employees are the thirty-three thousand station agents who come directly in contact with the shippers, hear complaints, and keep advised concerning local traffic conditions. The commission only by duplicating the system of the railroads could hope to obtain similar results. But this manifestly would be impracticable.

Rate-making by any commission could not fail to bring rates more and more upon a cost of service or mileage basis. Such has been the result in other countries, and it would be inevitable here. It would be absolutely impossible to adapt the innumerable rates to changing conditions. Public officials could not be expected to take any chances in making changes. They would gain nothing by taking risks. Rates would tend to become uniform. They would lose their adaptability, and the value of the service principle would wholly fail, — a principle for the best interests of the public and of the railroads.[1]

[1] We have not here considered statutory *maxima*. These are, of course, as far as possible from rates based upon the value principle. They are usually placed so high above the rate the railroad would ever expect to charge as to have no effect whatever. Rates directly fixed

We must conclude, therefore, that although the value principle confers in its application a great power upon rate-making officials, and although the power is liable to abuse, it is impracticable to change the practice without changing the principle; that the practice should not be changed, and that the railroads should continue to exercise the power of making initial rates.

But this does not mean that unreasonable rates do not exist. Out of the innumerable rates made by railroad officials it would be strange if some were not unequal and unjustifiable. It simply means that it is inexpedient to change the whole machinery of rate making to reach exceptional cases. Rates as a whole are reasonable, just, and lower than in any other country of the world. What is needed is not a change in the general rate-making system, but a remedy in the scattered cases where the system works imperfectly.

How rates must be made.

"Charging what the traffic will bear" — applying the value of service principle — bases charges upon ability to pay. Cheap goods and long-distance traffic must pay lower rates than valuable goods and short-distance traffic. The very essence of the principle is *difference* in ability. But as we have just noticed it is much easier to state the existence of a difference than its

by Congress would, of course, be wholly out of the question. The nature and extent of the subject requires a delegation of power to a commission, if any action at all is to be taken. See Chap. X.

extent. What determines the relative charges upon two articles? — more especially, what makes the particular rate? It is not wholly the value of the article, because some cheap articles which occupy much space and increase cost, or the carriage of which is attended with risk, pay high rates. And if our examination has taught anything it is that cost and risk, while factors, are not of first importance. Value first, and then cost and risk — all must be taken into consideration. The weight to be given to each factor must depend upon the particular conditions. Yet with all this we are not getting very near the making of the actual charge — we are still dealing in generalities. Somehow and in some way a definite rate for a particular service *must* be named. A charge in cents per hundred pounds must be stated, and this charge must be reasonable. Now, it is about as easy to show that a rate is reasonable or unreasonable *per se* as it is to demonstrate that a certain river is, or is not, deep. Comparison is necessary. And, taking into consideration the different factors, by comparison and in no other way a rate may be made which, while it may not be demonstrated to be correct, can seldom be shown to be wrong.[1]

[1] Similar difficulties attend the reverse of the process of making a reasonable rate — proving the unreasonableness of an existing rate. If a rate be fairly made in the manner pointed out it cannot well be shown to be unreasonable. It is only when it is exorbitant *per se* or when it cannot stand comparison with other rates that its unreasonableness can be established.

Comparison of rates may be made in two ways:

(1) By comparing charges upon different commodities.

(2) By comparing rates for similar services made by different carriers.

Rates should be relatively as well as absolutely reasonable. The value of service principle, while involving differences in charges, does not depart from the fundamental doctrine of fair and equal treatment. Differences in rates should not be made without reason. Comparison with charges made by the railroad upon other commodities of similar nature and value is always legitimate, both in making a new rate and in determining the reasonableness of an existing one.

Upon similar principles, rates of other railroads for similar services are proper standards of comparison. Of course, the outcome of comparison may not be reasonable because the rates compared with may not be reasonable. The result may be wrong because the standard is wrong. But the present adjustment of rates is largely the result of evolution. Competition, compromises, increases in the train and carload, economies in operation, the volume of the traffic, the development of the country, and innumerable other matters have all had their effect in making rate schedules what they are. It may also be taken for granted that only under exceptional conditions will a railroad make its rate unreasonably low. Taking into consideration, then, all dissimilar

circumstances and conditions, rates of other carriers furnish fair standards of comparison. Therefore, when rates do not exceed the charges made for the same service by other railroads similarly situated they are *prima facie* reasonable. On the other hand, when rates are excessively high when compared with the charges of other roads for similar services under similar conditions, they are presumptively unreasonable. In either case the presumption must be rebutted by proof that the results of the comparison are wrong. But this proof, from the nature of things, is seldom available.[1]

Let us now return to an examination of the details of rate making and of those consequences of the value of service principle — classification and discrimination.

[1] As a matter of practice and not of theory, it may also be noted that a reasonable rate may be the result of a compromise. A rate which will give the railroad a satisfactory return over the actual expense may seem entirely unreasonable to the shipper. A rate which leaves the shipper a satisfactory profit over cost of production may seem unreasonable to the railroad. A reasonable rate between the two standards may be unreasonable from the point of view of both carrier and shipper.

CHAPTER IV

CLASSIFICATION AND TARIFFS

GROUPING articles into classes for the purpose of making rates would be convenient if the basis of charges were cost of service. Some goods cost more to handle than others. There is a difference in risk attending different shipments. A separate rate for each commodity between each two railroad stations would involve great labor and produce confusion. Still, the elements which enter into cost are comparatively simple. Railroad business could undoubtedly be carried on upon a cost basis without classification. The difficulties would not be insuperable. But the principle of charging according to the value of the service compels classification. If the same service have a varying value when rendered to different commodities, classification is absolutely necessary. In seeking to impose charges where they can best be borne, the controlling considerations are so complicated that it is manifest that separate rates could not be fixed for each of thousands of different items of traffic. An average must be struck. A practicable method must be provided for the operation of the value principle.

Classification is the machinery required in "charging what the traffic will bear."

The classification and the tariff of rates are interdependent. Classification is a means of making a rate. It fulfils no purpose in itself. The tariff is the necessary complement of the classification. The one is useless without the other.

We saw in our examination of underlying principles that the practice of basing rates upon the value of the service had its origin in the custom of the old English canals to collect tolls according to a rough classification which imposed the heaviest tolls upon the most valuable goods. Thus the schedule of tolls of the Sheffield canal, made in 1815, was as follows:

Development of classification.

TONNAGE RATES

	Per ton per mile.
For all coal, coke, charcoal, limestone, ironstone, slag, sand, arsura, sweep-washing-waste, stones, slates, pavors, cord-wood, cinders, manure, bones for manure, turnips, carrots, and potatoes	2*d.*
For all pig-lead, pig-iron, ballast, nut or bushel-iron, old cast-iron, bricks, old ropes and rags, timber unbroken, bones and hoofs	3*d.*
For all bar, rod or rolled iron or steel, cast-iron goods, deals and other broken timber, lime, onions, apples, pears, peas, beans, rope, line, cole, mustard-seed, and all kinds of green groceries that are not by this Act specially charged by name	4*d.*
For all dry groceries, and all kinds of manufactured	

goods, wares, and merchandise, in casks, hogsheads, or other packages . . . . . 5*d.*

For all corn, grain, or malt, 1*d.* per quarter [roughly 5*d.*]

For all other goods, matters, and things not specially charged . . . . . 6*d.*[1]

American railroads followed the English roads in classifying the goods to be carried, although it does not appear that the early railroad charters themselves contained classifications. It is curious to note, however, that an early Maryland charter (1827) practically classified traffic according to the *direction* in which it moved. Charges north to south were not to exceed one cent per ton-mile for toll and three cents for transportation; south to north the toll and transportation charge were each three cents.

The early American classifications stood upon a similar basis to, and were hardly more elaborate than, the canal classifications. In fact, classifications in use as late as 1856 contained only thirty-three items. The development of the practice since that time and its increase in complexity is shown by the fact that the present "Official" classification contains over nine thousand items.

Prior to the enactment of the Interstate Commerce Act in 1887, nearly every railroad had its own classification which applied to all traffic in the absence of a joint classification, and always applied

[1] From Acworth's *The Elements of Railway Economics*, p. 104.

to local traffic. There were also numerous joint classifications made and used by connecting lines or by competing roads between important termini. There was, however, nothing approaching a uniform classification even for particular sections of the country.

The requirements of the Interstate Commerce law — especially of the long and short haul clause — rendered it impracticable to do business under separate and conflicting classifications, and an effort was made to obtain a uniform classification for the entire country. The result was the "Official" classification, but not complete uniformity.

At the present time freight classifications in the United States are not directly those of the railroads themselves. They are made for the roads and in their behalf by three classification committees, composed of representatives from all the roads operating in the territory where the particular classification prevails. These committees are empowered to designate the class to which each article offered for transportation shall be assigned; to construct a classification, and revise and supervise it. The classifications made by these committees are known as "Official," "Southern," and "Western." The "Official" classification prevails east of the Mississippi and north of the Ohio and Potomac Rivers, and is in charge of a committee with headquarters in New York. The "Southern" classification is in force east of the Mississippi and south of the Ohio

and Potomac Rivers, and is administered by a committee in Atlanta. The "Western" classification prevails through the rest of the country, and is under the control of a committee in Chicago. There is, also, a classification applicable to Pacific coast business, issued by the Transcontinental Freight Bureau, with headquarters in San Francisco. State classifications, for traffic wholly within the State, are in force in Illinois, Iowa, and some of the Southern States, and are made by State Railroad Commissions.[1]

Classification in principle and practice.

Making the classification is a part of making the charge. The class to which an article is assigned determines the rate it must pay. It follows, therefore, that the principles governing classification are those which control the making of rates. Cost of service and risk are elements in classification. It costs more to carry a ton of cotton than a ton of iron-ore because it occupies more space. There is greater risk in carrying a carload of glassware than a carload of hardware. Cost and risk, however, are subordinate to the principle of value. As a general rule the classification of an article is determined by the proportion which the expense of carriage bears to its ultimate price. An article is classed low when the expense of carrying it constitutes a large part of the price paid by the consumer. Conversely, an article

[1] Report of Industrial Commission, Vol. XIX, p. 384.

is classed high when the expense of carriage is but a small part of the ultimate price. In other words, classification depends in large measure upon the value of the article in proportion to its bulk — a corollary to "charging what the traffic will bear."

Classification being largely based upon the estimated value of the service must necessarily produce some inequalities and discriminations between commodities. The subject is so complex that such results are unavoidable. The only possible course is to constantly supervise the classifications in an attempt to avoid unjust discriminations and to meet changing business conditions.

Railroads serving different sections of the territory to which a classification applies are interested in promoting different industries. All the industries want low rates. These contentions necessarily involve compromises in making classifications. In no other way can the equities between different industries and sections be preserved. A classification has been said to be the result of a series of compromises.

In practice, classification committees must consider a multitude of factors. In determining the classes different commodities should take, they would — as stated by the Interstate Commerce Commission[1] — "take into consideration whether commodities were crude, rough, or finished; liquid

[1] Report of Interstate Commerce Commission for 1897.

or dry; knocked down or set up; loose or in bulk; nested or in boxes, or otherwise packed; if vegetables, whether green or dry, desiccated or evaporated; the market value and shipper's representations as to their character; the cost of service, length, and duration of haul; the season and manner of shipment; the space occupied and weight; whether in carload or less than carload lots; the volume of annual shipments to be calculated on; the sort of car required, whether flat, gondola, box, tank, or special; whether ice or heat must be furnished; the speed of trains necessary for perishable or otherwise rush goods; the risk of handling, either to the goods themselves or other property; the weights, actual and estimated; the carrier's risk or owner's release from damage or loss."

In the "Official" classification all commodities, save those included in commodity tariffs, are divided into six classes.[1] The articles which take the highest rate are put into the first class; the lowest, into the sixth class. The sixth class is sometimes called the "special" class. The following extracts taken at random from the "Official" classification — referring to less than carload lots in all classes except the sixth — illustrate the method of grouping commodities in classifications, and make clearer than

[1] The "Western" classification has five numbered (1–5) and five lettered (A–E) classes. The "Southern" classification has six numbered (1–6) and eight lettered (A–H) classes. The lettered classes include the low-grade traffic.

any description the factors which, in practice, determine the class to which an article shall be assigned:

Class 1. Agricultural implements (knocked down),[1] blankets, books, bric-a-brac (pottery), buttons, candy, carpets, dry goods, feather beds,[2] engravings, glassware (ordinary), groceries, honey (in glass), ink (in bottles), kerosene (in glass or cans), liquors, lounges of bamboo or rattan,[3] Oriental rugs,[4] perfumery, printed matter, shoes, silk,[5] silverware (plated), umbrellas, valises, wash-boilers (not nested), watches,[6] wood alcohol (in glass).

Class 2. Alum, borax (in bags), bread (hard or brown), cotton bags (new), cotton (uncompressed bales), cutlery — not plated — dates, eggs (in patent carriers), glue, honey (in cans), ink (in cans), pepper, spices, valves, wash-boilers (nested), wood alcohol (in cans, boxed).

Class 3. Ale, borax (in barrels), brass castings, chalk, chicory, cotton bags — second hand, cream of tartar, Epsom salts (in bags), glycerine, graphite (in bags), hawsers, honey (in casks), ink (in barrels), iron fenc-

[1] Agricultural implements *set up* take double first class rate. It is apparent, therefore, that the first class is not really the highest class. Some articles take 1½, 2, 2½, 3, and 4 times first class rate. The agricultural implements above referred to are those "not otherwise specified" (N. O. S.).

[2] Take double first class rate.

[3] Take three times first class rate.

[4] Take 1½ to three times first class rate.

[5] Silk takes first class when valuation does not exceed $1 per pound and release is signed above that amount. Otherwise silk takes three times first class rate.

[6] When valuation limited to sixty cents each. Otherwise not taken.

ing, macaroni, peanuts, ploughshares, raisins, solder, stoves (crated).

Class 4. Ashes, asphalt (in bags), barytes, coke, clay and terra-cotta conduits, cotton (in compressed bales), crowbars, feldspar, fence wire, fertilizers, graphite in barrels), iron bolts, pig lead, plaster, talc, tar.

Class 5. Barley, bran, corn, flour, glucose, malt, middlings, oats, old matting (in bales), rye, wheat.

Class 6. (Carload lots.) Ashes, asphalt, ale-barrels, brick, crude chalk, fertilizers, flour, glucose, grain — barley, corn, oats, rye and wheat, iron and steel billets, blooms, ingots, lime, malt, ore — graphite, iron, manganese, and mica, salt, sand, sawdust, sewer pipe, shells, slate roofing, soot, tile, zinc — in pig or slab.

It is worth while now to examine some of these specimen classifications in order to ascertain how the principles we have considered work in actual practice. Agricultural shipments take double the rate when set up than when knocked down because they occupy more space. They occupy much space anyway. Cost principally governs their classification. Silk occupies little space but it is valuable. The value principle makes its high classification and places more valuable silk still higher. Risk puts glassware in first class — it is destructible. Kerosene oil takes the same class for a similar reason — it may be destructive. Feather beds are of little value, but they take up much space. Cost compels them to pay double first class rates. Value places books, blankets, dry goods, engravings, plated silverware, umbrellas, valises, and sixty-cent watches in

first class. In the same class cost puts wash-boilers which are not nested. Nested wash-boilers take the second class because they occupy less space. It costs just as much to carry old cotton bags as new ones, but the latter go into second class and the former into third. Value governs. Wood alcohol in glass takes first class; in cans, second class. There is less risk of breakage. Cotton in uncompressed bales is in second class; in compressed bales, fourth class. The reason is difference in cost. Ashes, brick, lime, ore, salt, sand, and sawdust take the very lowest class and lowest rate because that is "all the traffic will bear."

Shipments in carload lots furnish a larger paying freight relative to dead weight, and a smaller proportional expense for loading and unloading, billing and collecting, than small shipments. Shippers in carload lots may also be expected to furnish a continuing volume of business. All classifications recognize these distinctions and place many commodities in different classes for carload lots and less than carload lots — the carload lot taking the lower class and resulting lower rate. Indeed, as we have just noticed, the very lowest class includes only carload shipments.

Carload lots.

The difference in the classes to which commodities are assigned when shipped in carload lots (C. L.) and less than carload lots (L. C. L.) is illustrated by the following extracts from the "Official" classification:

Article.	Class for L. C. L.	Class for C. L.
Ale, in wood	3	5
Blood, dried, in packages	3	6
Chicory	3	5
Counters and shelving	1	3
Crackers, in baskets	1	4
Fertilizers	4	6
Flour, in quantities less than 35,000 lbs.	5	. . .
Flour, in quantities of 35,000 lbs. and over	. . .	6
Hides, pressed in bales	1	4
Honey, in kegs	2	4
Iron, Angle, Band, etc.	4	5
Lead, Pig	4	6
Machines, Sewing	1	3
Oil, Cotton seed, in cans, boxed	2	5
Oranges	2	3
Ore, Zinc	4	6
Paper, Printing	3	5
Pianos	1	1
Pulp, Wood	4	6
Rope, Hay, on reels or in compressed bales	1	5
Seed, Clover, Red Top, or Timothy	3	5
Shingles, Wood	4	6
Water, Mineral, in demijohns packed, or in carboys	1	5

This separation of articles in respect of the size of the shipment does not apply to all commodities, for in some the volume of business has not developed sufficiently to call for carload shipments. Growth of business produces an increase in the proportion of carload ratings.

It will be noticed that the difference in the classification and consequential rate which commodities take when shipped in carload, and less than carload,

lots is wide. It is usually much greater than the difference in rates between articles in any two of the lower classification groups. It should be observed, however, that, as a general rule, less than carload shipments move more rapidly than carload lots. It must also be noticed that in order to obtain a carload rating more weight may be paid for than is actually carried. A carload lot does not mean the amount which can be shipped in a particular car. It is the minimum weight — more or less arbitrarily fixed — which the shipment must be sent at to receive the reduced charge. The minimum weight under the "Official" classification is 30,000 pounds upon all property, except when otherwise provided.[1] Payment must be made upon that basis to obtain the carload rate, even if the actual weight be much less. But actual weight in excess of the prescribed minimum must be paid for. In some cases where it would be impossible for an actual carload to even approximate the minimum weight a lower minimum is prescribed. Thus the minimum weight for church furniture, settees and tables is only 10,000 pounds. But the railroad protects itself by putting these articles in Class 2 and making them pay a comparatively high rate.

[1] In 1887 the minimum carload weight under the "Official" classification, except where otherwise specified, was for articles in the third class and higher, 20,000 pounds; lower than third class, 24,000 pounds. In February, 1899, lower than third class was made 30,000 pounds, and in July of that year that weight was required from all classes. This last requirement has continued to the present time.

While carload lots are manifestly entitled to a lower classification than small shipments, the extent of the difference presents a serious problem. By means of carload ratings the large shipper can undersell his small competitor and possibly force him out of business. Moreover, the manufacturer in the East cannot ship in small lots to the retailer in the West and compete with the Western jobber who obtains the benefit of low carload rates and distributes in his immediate vicinity. A wide difference between the carload and less than carload rate operates unfavorably to the manufacturer or jobber in New York who desires to directly supply the retail trade in the West, and favorably to the Western or Southern jobber who desires to obtain a low rate for his wholesale shipments. The interests of localities are the interests of the railroads serving them. Thus the tendency of the "Official" classification is to protect the Eastern manufacturer by reducing the difference between rates for retail and wholesale shipments; while the inclination of the "Western" and "Southern" classifications is to promote the interest of the wholesale dealers within their territory.

Another difficulty arises in determining the minimum carload weight. Any increase in the minimum operates to the disadvantage of the small shipper and Eastern manufacturer. On the other hand, the interests of the railroad require that the load should have some relation to the actual capacity

of the car, and the increase in the size of the freight car cannot be ignored. These problems can only be solved by applying, so far as practicable, the principle that the difference in the cost of service with respect to a carload lot and a smaller shipment should measure the difference in the charge.

A uniform classification for the whole country, if practicable, would be desirable. The creation of the present three classifications was a long step in the direction of uniformity, but inconvenience and inequality result even from the threefold system.[1] It is difficult for shippers to ascertain accurately the rates on any particular commodity when it passes from the territory covered by one classification to that of another. An unbroken through rate would avoid confusion. Different classifications in different sections may also produce inequality and injustice to shippers seeking to reach the same market. The especial desirability of a uniform system arises, however, not from any difference in the absolute cost of the shipment of any commodity under different classifications, but from the fact that only by uniformity of classification can the relation between competing commodities — determined by classification — be

Uniformity of Classification.

[1] The number of different classifications in the United States before the adoption of the present system is indicated by the fact that at one time there were 138 distinct classifications in the Eastern Trunk Line territory alone. It was practically impossible for a shipper to ascertain in advance what his rate would be or what his competitor was paying.

preserved in different sections. Differences in the classifications of wheat and flour may determine the milling point.

A uniform freight classification, prepared after long deliberation and much friction, was approved by all the railroads in the country, except one, in 1890. The opposition of one of the Eastern trunk lines defeated the movement. This failure discouraged further effort. A later and unsuccessful attempt was however made to merge the "Official" and "Western" classifications. No substantial advance toward a uniform classification has been made in recent years, although it was proposed in the recent Cullom bill — which has never passed — that one should be made by the Interstate Commerce Commission.

The practical difficulties in the way of a uniform classification seem almost insurmountable. Conditions in different sections necessitate differences in classification. Commodities which are largely produced in one territory are there entitled to a classification which will enable them to compete in the world markets — a classification unjust to the railroads in parts of the country where such commodities are carried but little. A uniform classification is at present only possible through compromises, which would probably result unsatisfactorily to all parties, or through permitting commodity rates — which we shall consider later — whenever the uniform classification would operate prejudicially to

local interests. The latter course would probably result in increased complexity rather than simplification. Another objection to the adoption of a uniform classification is that it would necessarily involve the adoption of new schedules of rates all over the country — rates being dependent upon classification — which might upset business conditions.

A classification by itself is of no use. Grouping commodities into different classes serves no purpose except to prepare a basis for the application of charges. Making a classification is merely the first step in rate-making. The classification and the tariff must be read together to obtain the rate.

Class Tariffs.

Class tariffs — tariffs based upon classifications as distinguished from tariffs upon specific commodities — are of two kinds:

(1) Local;

(2) Joint.

Local class tariffs state the rates upon the different classes of traffic between stations *nominatim* upon the same road. Joint class tariffs are made by the agreement of two or more connecting roads and give the rates between stations upon different roads.

Classifications, as we have seen, are made by classification committees representing many different railroads. Tariffs are made by the railroads themselves. Classifications contain no reference to rates. Class tariffs do not mention commodities. They only give rates applicable to the numbered classes

of the classification. A specimen of a local class tariff and of a joint class tariff follow:

LOCAL CLASS TARIFF

Between New York and	CLASSES. (Rates in Cents per 100 Pounds.)					
	1	2	3	4	5	6
Harlem River, N. Y.	8	7	6	5	5	5
New Rochelle, N. Y.	12	10	8	6	5	5
Greenwich, Conn.	13	11	9	8	7	7
South Norwalk, Conn.	15	13	10	8	7	7
Milford, Conn.	16	14	12	10	8	8
New Haven, Conn.	17	14	12	10	9	8
Wallingford, Conn.	18	14	12	10	9	8
Hartford, Conn.	20	17	14	12	10	9
Springfield, Mass.	20	17	14	12	10	9

JOINT CLASS TARIFF

Between Boston, Mass., *via* Belchertown, Mass., and	CLASSES. (Rates in Cents per 100 Pounds).					
	1	2	3	4	5	6
Brattleboro, Vt.	24	22	18	14	13	12½
Northfield, Mass.	24	22	18	14	13	12
Miller's Falls, Mass.	22	19	17	14	13	12
Amherst, Mass.	20	17	14	12	10	8
Palmer, Mass.	18	15	13	11	10	8
Willimantic, Conn.	20	18	15	13	11	9
Norwich, Conn.	20	18	15	13	11	10
New London, Conn.	22	19	16	14	12	10

Commodity tariffs contain the charges upon specific commodities. They are entirely outside the classification. The railroads reserve to themselves the right, in respect of many

Commodity Tariffs.

articles, to make and put in force these special and independent tariffs. They apply as a general rule to heavy or bulky commodities such as grain, lumber, coal, iron, fertilizers, live stock, and oil which move in carload lots.[1]

Commodity tariffs may be either local or joint, although they are generally the latter. Here is a specimen of a joint commodity tariff: [2]

COMMODITY TARIFF

To Spokane, Washington. Articles.	(Rates in Cents per 100 Pounds) From			
	New York, Boston and common points.	Cincinnati, Detroit, Buffalo, Pittsburgh and common points.	Chicago, Milwaukee and common points.	Mississippi River and common points.
Copper, bar and ingot	179	179	179	179
Earthenware	154	154	154	149
Fertilizers	. . .	. . .	60	60
Lumber	. . .	. . .	85	84½
Paper (cheap)	129	129	119	119
Petroleum	. . .	. . .	144	144
Soap	123	123	123	120
Stoves (cast iron)	189	185	170	170
Zinc, plate and sheet	173	173	170	170
Zinc, slab	128	128	128	128

[1] The much greater part in bulk of the freight transported in the United States moves at commodity rates. But probably the greater gross revenue is produced by articles carried at class rates.

[2] Sometimes so many articles are excepted from the classification, and a commodity rate given, as to render class tariffs largely inoperative. This is particularly the case upon the transcontinental roads.

Commodity rates are lower than class rates and are granted for a variety of reasons. Competition with water routes may necessitate concessions in charges. This is especially true in the case of transcontinental traffic. Railroads desire to promote the interests of manufacturers within their territory, and commodity rates enable such manufacturers to reach out into new markets. Commodity rates may also be granted to enable a new industry along the line of the railroad to establish itself in competition with established industries elsewhere. There is a constant demand for concessions in the way of commodity rates and a constant increase in their number. When a special rate has once been granted it is difficult to change it.

Commodity rates do not involve discrimination between persons, since all shippers upon a given railroad receive the same rates and they must be posted and filed with the Interstate Commerce Commission. They may involve discrimination between places — but usually only discriminations *in favor* of the places upon the railroad granting them. The problem of the road is to promote the interests of its patrons by concessions in the way of commodity rates, and at the same time obtain for itself as high a rate as the traffic is able to bear.

Rates in this country are not in form upon a mileage basis. They are seldom so in fact. While many of the early charters prescribed maximum rates upon that basis, and several State statutes

now contain similar provisions, the statutory maxima have always been so high as to have no effect upon the real rates or the methods of making them. The value of service theory cannot operate upon a mileage basis. Instead, therefore, of a general mileage tariff each railroad has, as we have seen, numerous class and commodity tariffs, giving the specific rates upon the different classes of commodities between each of its stations and every other station upon its road and upon connecting roads where a through rate is made. There are as many tariff sheets as there are stations upon the road. The rate is not given for distance, but for transportation between the stations by name. Making tariffs.

In making tariffs, the controlling factors differ from those governing the making of classifications. The classifications determine the relation of charges; the tariff the specific charge. Different roads with the same classification must make very different rates for similar services. As we saw in our examination of the subject of equal mileage rates,[1] physical and commercial conditions absolutely prevent different roads from making the same charge for the same haulage. Gradients largely determine the cost of construction and operation and the train load which can be moved. The railroad through the sparsely settled country must charge high rates or go out of business. More than any other factor, the *density of the traffic* must determine the rate. The railroad

[1] See page 43.

which is obliged to raise a million dollars a year to meet expenses and has a million tons of freight, obviously must charge a dollar a ton; if it have two millions, fifty cents a ton is sufficient.[1] Increases in tonnage permit decreases in charges. The law of increasing returns enters into the rate.

Formerly it was a common practice to have two sets of rates. One applied to freight moving in the direction of the great bulk of the traffic; the other to freight moving in the opposite direction — that of the empty cars. The growth of the country and the development of traffic have, however, largely rendered this practice unnecessary. As a general rule the same rate governs in both directions.

In making rates upon long-distance traffic it is customary to give small stations grouped about an important shipping point the same rate as that point. These small stations are said to be "common points," with the large station.

The amount of the charge largely depends upon

[1] "If I have $100,000 profit to raise and 100,000 tons of freight it is very easy. I must make a profit of $1 a ton. Now if you give me 200,000 tons 50 cents a ton will be sufficient; and if you give me 400,000 tons 25 cents a ton will be sufficient. The density of traffic must determine the rate. The cost varies on the different divisions of a railway. Among sixteen divisions on the Great Northern we found some places where the cost is three times as much as in others. If the average rate or the average cost were applied to some divisions the rate would be prohibitory almost. We have divisions where the amount that it costs us for transporting a ton of freight 100 miles is 20 per cent higher than the average rate that we receive from the public for the whole road." — Testimony of Mr. James J. Hill before Senate Committee on Interstate Commerce, 1905.

the risk assumed by the railroad. We have seen that risk is a factor in classification and influences the relation of charges. It also directly affects the actual rate. Freight shipped at carrier's risk, *i. e.* with the full common-law liability of an insurer, is charged more than freight shipped under the conditions of the Uniform Bill of Lading. These conditions practically release the railroad from all liability except that resulting from its own negligence. And this is not all. The normal rate upon many valuable articles is based upon a limited value being placed upon them. If lost or destroyed no more than the agreed valuation is recoverable. If the shipper desire to ship at a higher valuation, or with unlimited liability, he must pay a much higher rate.[1] Only a very small percentage of

[1] The following extract from the "Official" classification shows the method adopted — the different rates being made by means of the classification.

Description of Article.	L. C. L.	C. L.
Concentrates, Lead — when consignor's valuation is not expressed or when expressed exceeding $100 per net ton	2	5
Valuation expressed by consignor not exceeding $100 per net ton (subject to Note) .	3	6

NOTE. — The following clause must be entered in full on shipping order and bill of lading and signed by consignor: "The consignor of this property has the option of shipping same at a higher rate without limitation as to value in case of loss or damage, from causes which would make the carrier liable, but agrees to the specified valuation named in case of loss or damage from causes which would make the carrier liable, because of the lower rate thereby accorded for transportation."

shipments is made upon the full liability basis. It is cheaper to insure than pay the difference in charges.

Publishing Tariffs.

The Interstate Commerce Act provides that all common carriers shall plainly print and post for public inspection in all stations local rate tariffs in force; that no advance in published rates shall be made except after ten days', and no reduction except after three days', public notice; and that "when any such common carrier shall have established and published its rates, fares, and charges in compliance with the provisions of this section, it shall be unlawful for such common carrier to charge, demand, collect, or receive from any person or persons a greater or less compensation for the transportation of passengers or property, or for any services in connection therewith, than is specified in such published schedule of rates, fares, and charges as may at the time be in force."

The Act also compels carriers to file their tariffs with the Interstate Commerce Commission and to notify the Commission of all changes. It further requires all joint tariffs to be filed with the Commission, and empowers the Commission to determine to what extent they shall be made public. It also provides that joint rates shall not be advanced or reduced except after ten and three days' notice respectively to the Commission, and that it

shall be unlawful to deviate from the joint rates as filed with the Commission.[1]

The purpose of these statutory provisions is to give full information to the public of the rates — both in class and commodity tariffs — for all transportation services. The clauses requiring notice of changes in rates are designed to prevent discriminations such as "midnight tariffs" — changing the rate at night to obtain the favored shipment and changing it back the next morning. These provisions, however, do not cover the whole field. They deal with the tariff and not with the classification. The framers of the Interstate Commerce Act apparently failed to realize that any change in classification necessarily involves a change in rates. When an article is taken from a lower and placed in a higher class the change in effect is an advance of the rate from that of the lower to that of the higher class. Charges can be raised or lowered through classi-

[1] The Interstate Commerce Act, of course, applies only to interstate commerce. State statutes providing for publicity in rates upon interstate traffic by *posting tariffs at stations* are in force in Alabama, Arkansas, California, Colorado, Florida, Georgia, Kansas, Kentucky, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Texas, Virginia, and West Virginia. Rates must be *printed* in California, Florida, Georgia, Illinois, Kansas, Kentucky, Minnesota, Missouri, Nebraska, Nevada, North Carolina, North Dakota, South Dakota, Texas, Utah, and Virginia. Rates must be *kept for public inspection in stations* in Iowa, Minnesota, Nebraska, North Dakota, South Dakota, and West Virginia.

fication without touching the tariff at all. But changes cannot be made as readily in the classification as in the tariff. The one requires the action of the classification committee; the other is made by the road itself.

We have now examined the first result of the value principle in making rates — the classification and its complement, the tariff. Let us next consider the second result — discrimination.

CHAPTER V

DISCRIMINATION

We have seen that a necessary corollary of the value of service principle in rate-making is that the same service has a varying value when rendered to different localities. Local discriminations necessarily result from the application of the value principle. If they are within its application they are just; but they may go beyond and be unjust. Some discriminations, therefore, may not be wholly just; some are wholly unjust. The value principle draws the line between just and unjust discriminations. But all discriminations affect rates, and we cannot fairly consider those on the one side of the line without examining those on the other. Showing how rates should not be made shows how rates should be made.

First let us see what a rate discrimination is. Broadly speaking it is an inequality in charges. More particularly it is a difference in charges for transporting (1) an equal quantity of (2) like articles in (3) the same manner for (4) an equal distance. Nature and Justness of Discriminations.

An inequality in charges for similar services may be justified by different circumstances and conditions

— a *just* discrimination. It may be without any reasonable basis and the result of favor — an *unjust* discrimination.

Discrimination between *commodities* results from classification when like articles are placed in different classes. Classification is not discrimination when it affects unlike commodities. Whether an unjust or just discrimination between similar commodities is produced by classification depends upon whether the differences are arbitrary or are based upon considerations of cost, risk, or value. The value of the service is the controlling factor; and, as already shown, classification upon the basis of value, modified by the elements of cost and risk, is reasonable and proper, and does not constitute unjust discrimination, or discrimination at all unless it affect similar articles.[1]

Discrimination between *localities* is the charging of higher rates for transporting the same article an equal distance; or the same rate for a lesser distance. Local discriminations are unjust when not justified by different circumstances or conditions. They are just when the advantages of one place

[1] Differences between commodities as involved in classification have been fully considered. Unjust discriminations *e. g.* when goods of equal value and involving the same cost and risk to move are placed in different classes, do not require separate discussion. The principles governing unjust discriminations between places and persons are applicable to them, and the Interstate Commerce Act (sec. 3) prohibits the giving of any undue advantage to "any particular description of traffic."

over another produce conditions which render discriminations necessary in order to obtain traffic.

Discriminations between *persons* — preferential rates — stand upon an entirely different basis from local discriminations. They can be defended upon no theory of rates. The value, cost, and risk of the same service is the same without regard to the person for whom it is rendered. Personal discriminations are unjust. They work, in the end, prejudicially to the railroad; drive the small shipper out of business, and injure the whole community.

From these principles we may draw these conclusions with respect to the justness of local and personal discriminations:

(1) A discrimination in charges is unjust when the same service is rendered to different localities and the circumstances and conditions do not warrant it.

(2) A discrimination in charges is just when the same service is rendered to different localities and the circumstances and conditions warrant it.

(3) A discrimination in charges is unjust when the same service is rendered to different persons.

But before examining in detail the forms discriminations take let us see how they work. We can best do this by comparing them with their antitheses — equal charges.

Equal rates are more to be desired than low rates. Cost of transportation is, as a rule, of relatively small importance. A hundred factors affect the price of a loaf of bread more than the expense of carrying

the wheat to market. Discriminations — differences in charges without corresponding differences in conditions — are, on the other hand, real grievances. If all the shippers of the wheat pay the same rate they can all do business. If the rate be raised the consumer pays a little more for his bread. If it be reduced the consumer in theory pays less. In practice the middleman usually takes the benefit of the reduction. But if the rate be reduced to some shippers and not to others, those less favored cannot stand the competition. A slight difference may be just enough to drive them out of business. Similarly, a city may, on account of its location, enjoy low rates, but if its rival obtain still lower the former place will complain, — and with reason, if the difference be not based upon different conditions. The ground of complaint will not be that the rates of one place are too high, but that the rates of the other place are too low.

Discriminations and equal rates.

It cannot be too distinctly borne in mind that many persons in complaining of unreasonable rates actually intend to charge unequal treatment. As said by an English Parliamentary committee, "they really mean not that the rates they pay themselves are too high, but that the rates others pay are too low."

And now let us look at discriminations in detail.

Local discriminations, as we have seen, result from the application of the principle of value in rate making. The same service may have a different value

when rendered to different localities. When competition makes local discriminations necessary they are justified by the value principle. But local discriminations which are not warranted by this principle, or which go further than it requires, are unjust.

Local discriminations.

The railroad is not indispensable to the community having the benefit of natural transportation. The locality having water communication will not pay more to the railroad for a service not requiring great speed than the water carrier charges. The traffic will not bear a greater rate. The railroad can only obtain the traffic of such a community by meeting the charges for water transportation, however low they may be. A discrimination in its favor merely recognizes the discrimination of nature. Similarly, a locality having more than one railroad will give its business to the road making the cheapest rate. The value of the service to the shipper cannot exceed that rate. A railroad must meet the charges of its competitors in order to obtain traffic.

The railroad is indispensable to the inland community which has but one. The service offered by the railroad is of more value to the shipper at such a place than where railroad and water meet. It is likewise of more value than to the shipper who has the choice of roads. When there are two railroads neither one is indispensable. The traffic of non-competing points will bear more than the traffic at

competing points because the service is needed more and is more valuable.

The consequence is that railroads usually make their rates lower to competitive points than to intermediate stations. As already shown, any rate which pays a profit above the actual expense of earning it, is worth getting, if no more can be obtained. A railroad in competing for business may offer rates which would bankrupt it if applied to its whole traffic. But if the competitive traffic pay nothing above the expense of handling it, it is not worth having.

The statement that low rates at competitive points impose heavier burdens upon local traffic is fallacious. The railroad could not get the through traffic at all unless it made low rates. Unless carried at an actual loss — impossible from an economic standpoint — it does the local traffic no harm. If it pay any profit — although insufficient to contribute to fixed charges — it reduces the amount necessary to be raised from local shipments. Low rates at competitive points by producing paying business not otherwise obtainable, in the end benefit the local traffic by enabling the railroad to reduce the rates thereon. Moreover a reduction of through rates to a competitive point generally benefits the surrounding territory. The low through rate to the distributing centre *plus* the local rate to the near-by station, is often less than the regular rate to that station, even though it be nearer the shipping point than the distributing centre.

Discrimination between places tends to stimulate production at competitive centres and, necessarily, to draw from less favored localities. Superior means of transportation often more than offset superior natural advantages for production. The result is not the fault of the railroad. It arises from the element of competition. Rates at competitive and non-competitive points can only be maintained relatively equal by the elimination of competition.

The intermediate station seldom has a right to complain of the existence of local discrimination, although it may have just cause to find fault with its extent. A railroad is often built to reach inland points. When built it will be of the utmost benefit to those places. But it cannot be built if it can obtain only local traffic, although it may charge that traffic all it will bear. It can obtain competitive traffic only by making a low rate, and it cannot be supported by through traffic alone. It must obtain (1) local traffic at remunerative rates; (2) through traffic at any rate which will show a profit above the expense of earning it. The inland community can only have the railroad by being discriminated against. The value of the service to it warrants the discrimination. President Hadley makes this point very clear by the following illustration: [1]

[1] *Railroad Transportation: Its History and Its Laws.* By Arthur Twining Hadley, p. 116. This scholarly work, although published before the passage of the Interstate Commerce Act and, therefore, not

"On the coast of Delaware a few years ago there was a place which we shall call X, well suited for oyster growing, but which sent very few oysters to market because the railroad rates were so high as to leave no margin of profit. The local oyster-growers represented to the railroad that if the rates were brought down to one dollar per hundred pounds the business would become profitable and the railroad could be sure of regular shipments at that price. The railroad men looked into the matter. They found that the price of oysters in the Philadelphia market was such that the local oyster-men could pay one dollar per hundred pounds to the railroad and still have a fair profit left. If the road tried to charge more, it would so cut down the profit as to leave men no inducement to enter the business. That is, those oysters would bear a rate of one dollar per hundred and no more. Further, the railroad men found that if they could get every day a carload, or nearly a carload, at this rate, it would more than cover the expense of hauling an extra car by quick train back and forth every day with the incidental expenses of interest and repairs. So they put the car on and were disappointed to find that the local oyster-growers could only furnish oysters enough to fill the car about half full. The expense to the road of running it half full was almost as great as of running it full; the income was

treating many modern questions, has never been superseded as an exposition of principles.

reduced one-half. They could not make up by raising the rates, for these were as high as the traffic would bear. They could not increase their business much by lowering rates. The difficulty was not with the price but with the capacity of the local business. It seemed as if this special service must be abandoned.

" One possibility suggested itself. At some distance beyond X, the terminus of this railroad, was another oyster-growing place, Y, which sent its oysters to market by another route. The supply at Y was very much greater than at X. The people at Y were paying a dollar a hundred to send their oysters to market. It would hardly cost twenty-five cents to send them from Y to X. If, then, the railroad from X to Philadelphia charged but seventy-five cents a hundred on oysters which came from Y, it could easily fill its car full. This was what they did. They then had half a carload of oysters grown at X, on which they charged a dollar, and half a carload from Y on which they charged seventy-five cents for exactly the same service.

" Of course, there was a grand outcry at X. Their trade was discriminated against in the worst possible way — so they said — and they complained to the railroad. But the railroad men fell back on the logic of facts. The points were as follows: 1. A whole carload at seventy-five cents would not pay expenses of handling and moving. 2. At higher rates than seventy-five cents they could not get a

whole carload, but only half a carload; and half a carload at a dollar rate (the highest charge the article would bear) would not pay expenses. Therefore, 3. On *any* uniform rate for everybody, the road must lose money, and, 4. They would either be compelled to take the oyster car away altogether, or else get what they could at a dollar, and fill up at seventy-five cents. There was no escape from this reasoning, and the oyster-men of X chose to pay higher rate rather than lose the service altogether."

Here the facts were so clear that the locality discriminated against was brought to recognize the necessity for the discrimination. Generally the facts are more complicated, and the difficulty of making clear the necessity for local discriminations greater. But the same principles underlie the complex as the simple case. The locality which pays a fair rate cannot complain that another place obtains a cheaper rate if the difference in conditions warrant it. And, as we have seen, unless the road obtain the traffic at Y at a cheap rate, it may not be able to take the traffic from X at any rate which it is able to pay.

Local discriminations to the extent made necessary by competition are not, as we have seen, unjust discriminations. Discriminations between places not induced by competition stand upon a different basis. Rates given merely to develop business may build up industries at favored points along the line of road. New traffic for the road may be obtained. But the increased business is generally at the ex-

pense of the development of the industries in the localities which receive no aid. Unless compelled by force of competition, a railroad has no economic right to make rates which will put less favorably situated places upon its line on an equality with communities possessing superior natural advantages. Paternalism has no part in the business of a railroad. But to give low rates and build up communities upon its line at the expense of places upon *other* roads, is not discrimination at all, as we have used that term.

It is only in times of unusual prosperity that railroads have enough business to tax their facilities. The tracks and equipment are generally sufficient to accommodate more freight than is offered. The railroad is on the lookout for additional traffic. Competition, therefore, exists at all places served by more than one road, or having several means of reaching markets. Industrial combinations have tended to confine the heavy traffic at most centres to the output of a few producers. Special efforts are made to obtain this traffic. Open offers would necessarily lead to uniformly reduced rates and, therefore, secret concessions to important shippers were, in years past, the rule. These preferential rates were unjust discriminations.

Personal discriminations.

Personal discriminations have taken a multitude of forms, varying from direct reductions in charges to indirect concessions for private cars or terminals.

The necessity for secrecy, except as a matter of expediency, has corresponded to the state of the law. As we shall see, before the Interstate Commerce Act discriminations were not prohibited, and the direct payment of rebates was common. The passage of this act made more complex methods necessary, but did not stop the practice. Since the enactment of the recent Elkins law, directed against discriminations, preferential rates have greatly diminished, and are granted only in devious ways. But the law has been only one of the causes of the decrease.

Here are some of the methods by which personal discriminations have been effected:[1]

(1) Special contracts at reduced rates. This

[1] In his statement before the Industrial Commission, Mr. George R. Blanchard said: "Discriminations against persons result mainly from secret rebates, which create unequal rates on direct through shipments or in combinations of rates in inward and outward products, so as to affect the through charges. In much less degree they arise from favoritisms in terminal facilities; quicker time in transit; unequal or hidden allowances in weights; dissimilar storage periods in cars or warehouses; preferences in supplying cars when the demand for them exceeds the supply; differences in special charges such as switching, loading, or unloading, or in cartage allowances; advantages alleged to be extended to enterprises in which the carriers may have interests, mainly coal; paying large forwarders mileages for cars so much in excess of legal interest on the cars furnished, and repairs and depreciation, as to be equivalent to abatements in rates; the leasing of elevators to, or making elevator contracts with, large handlers of grain, to their exceptional advantage; the grant of undue allowances under the fictitious guise of commissions, etc., and other minor advantages granted to preferred patrons." (Report of Industrial Commission, Vol. IV, p. 625. See also Ib. Vol. XIX, p. 349.)

form, perhaps on account of its very directness, has been less generally adopted than others.

(2) Payment of rebates. This was formerly the commonest method of discriminating. Publicity in accounts as well as more effective laws have largely put an end to rebates. When accounts are publicly filed it is a little difficult to put rebates in as operating expenses.

(3) Underbilling, by (a) accepting shipments at weights known to be understated, or (b) permitting traffic to be charged for as though carried a shorter distance than actually moved.

(4) Shipping goods under a false classification. Thus fine hardware may be shipped as some low class iron product, or woollen goods as cotton. This form of discrimination is especially hard to detect.

(5) Changing the destination in transit. Thus goods may be shipped at a lower rate for export and unloaded on the way.

(6) Excessive allowances to companies owning private cars. Fruit and dressed meats are usually shipped in refrigerator cars. The railroads seldom own these cars as they can be used — at least for fruit — only a small part of the year. Car companies, however, can use them advantageously in different parts of the country at different seasons. The railroads, therefore, allow the car companies a mileage on these cars, and sometimes grant them exclusive privileges. The mileage granted is often so excessive as to constitute an unjust discrimina-

tion, especially when the company carries its own freight; and when the railroads agree to use the cars of only one company the discrimination is still more unjust.[1]

(7) Excessive allowances to private terminals. The terminal road has become an important factor in personal discriminations. A large manufacturing establishment may own several miles of private tracks within its yards. A railroad company is formed to operate a railroad made up of these tracks, all the stock of which is owned by the manufactory. This railroad obtains a division of the rate with the railroads which carry the output of the factory. The division gives the little railroad much more than its fair share, and its owner thereby gets the rebate to obtain which it was formed.

Allowances for quantity in the shape of a reduction for carload lots is not an unjust discrimination. As we have seen, there is a larger paying freight in proportion to dead weight and less proportional expense for loading, unloading, billing, and collecting in the case of carload lots than in smaller ship-

[1] One private car company controls a large part of the refrigerator cars in the United States. It has a practical monopoly of the movement of fruit in many parts of the country, and is largely interested in the shipment of dressed meats and packing house products, as well as eggs, dairy products, and vegetables. The charges of these private car companies are said to be excessive and to have been recently largely increased. Excessive charges *by* these companies, as distinguished from excessive allowances *to* them, do not constitute cases of unjust discrimination, however much they may require governmental regulation.

ments. But the general principle of an allowance for quantity — a preferential rate for large shippers — is indefensible. A merchant may charge less for his goods at wholesale than at retail. A private dealer may make concessions to obtain a large order. But a railroad is engaged in a business affected with a public interest, and must treat all alike. Personal discriminations based on quantity, regardless of differences in cost, are wholly unjustifiable.

Personal discriminations necessarily tend to build up the large producer at the expense of the small. Energy, skill, and experience may prevail against local discriminations, but they are of no use when the small producer, handicapped at the outset, is denied the same rates his large competitor obtains. Rebates and other personal discriminations too often have driven the small manufacturer from the field and left it free for the corporate combination.

Under the common law, as stated by the English courts, it was the duty of a common carrier to afford equal facilities to all his patrons and to exact only a reasonable charge for his services. But he was not bound to treat all his customers with absolute equality. So long as he transported for every shipper at a reasonable rate, it was held that no one could complain if he chose to carry for some at a lower rate than for others. He could charge more than a fair rate to no one. He could charge less

Discriminations at common law.

than a fair rate to any one. "It is a common carrier's privilege to charge less than fair compensation to one person or class of persons, and others cannot complain so long as he carries on reasonable terms to them. Respecting preferences in rates of compensation, his obligation is to charge no more than a fair return in each particular transaction and, except as thus restricted, he is free to discriminate at his pleasure. This is the equal portion to all which the law exacts from the common carrier in his relations with the public." [1]

Under the common law, therefore, positive discriminations are prohibited. Negative discriminations are permitted. The carrier cannot grant special facilities to one shipper in preference to another; but he may, if he please, withhold the favor of lower rates from the one and not from the other. When railroads came into existence they naturally took advantage of this rule of the common law. Their managers saw a way to obtain traffic through favors, and discriminations began, increased, and permeated the whole transportation business.

This rule of the common law, that if the rate given to one shipper be reasonable in itself he has

[1] Menacho *v.* Ward, 27 Fed. Rep. 532, *per* Wallace J.

See also Fitchburg R. Co. *v.* Gage, 12 Gray (Mass.), Rep. 399.

While the rule of the common law is undoubtedly correctly stated in the text it has not been followed by several American courts of high standing. In fact, at the present time it is probable that the weight of American authority is in favor of equal charges to all persons for similar services — even in the absence of statutory provision.

no interest in the rate given to other shippers, could only have been justifiable in the days of carriers by wagon. It is fundamentally unsound when applied to railroads which, unlike the early carrier, often have a practical monopoly. The shipper *does* have an interest in the rate charged other shippers. He has a right to demand that the railroad shall afford him the same treatment as his competitors. The question of relative rates is often of more importance than that of absolute charges.

Discriminations before Interstate Commerce Act.

The injustice of the rule of the common law when applied to railroads, and the desirability of equal rates, induced legislation in England at an early date, having for its object the prevention of all forms of discrimination. The first statute was contained in the "Railway Clauses Consolidation Act" of 1845, which prohibited common carriers from charging more to one person than, during the same time, they charged others for the same kind of service. Statutory and constitutional provisions modelled after the English Act were adopted by several of the American States. These provisions, however, were not enforced; and if enforced, could not have reached the discriminations of real importance — those in interstate traffic.

Prior to 1887 Congress had enacted no law upon the subject. The result was that there was scarcely a pretense of maintaining rates. Concessions were given almost as a matter of course if the business of the shipper were at all profitable. It came to be

understood that published tariffs were made only for small shippers and those unsophisticated enough to pay the regular rate. The established rate was the exception rather than the rule. Shippers controlling the largest amount of business received the lowest rate, although advantageous concessions were often obtained by those upon the "inside."[1]

The result was often unsatisfactory even to those who obtained concessions, for they could never be certain that their competitors did not receive still better terms. It was most unfortunate from the point of view of the public, because the reduced rates were obtained by those who needed them least. Monopolies were so fostered and built up by rebates that they often became strong enough to control the railroads.

Interstate Commerce Act and Discriminations

The primary object of the "Act to Regulate Commerce" was to prevent unjust discriminations in interstate commerce. Discriminations had been so gross and prevalent that public sentiment had crystallized into a demand for their abolition by the only body capable of effective action — Congress. The report of the Cullom committee in 1886 brought matters to a head. Congress, after several disagreements between the Senate and the House, adopted the Interstate Commerce Act in February, 1887.

The second section of the Act is directed against unjust *personal* discriminations, and is modelled

[1] Report of Senate Committee of 1885.

upon the section known as the "Equality Clause" in the English "Railway Clauses Consolidation Act," already referred to. It reads as follows: "If any common carrier subject to the provisions of this act shall, directly or indirectly, by any special rate, rebate, drawback, or other device, charge, demand, collect, or receive from any person or persons a greater or less compensation for any service rendered, or to be rendered, in the transportation of passengers or property, subject to the provisions of this act, than it charges, demands, collects, or receives from any other person or persons for doing for him or them a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions, such common carrier shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful."

The third section of the Act is aimed generally at unjust discriminations against *persons*, *localities*, or *commodities*. It is modelled upon the second section of the English Act "for the better regulation of traffic on railways," passed in 1854, and the eleventh section of the Act of 1873 amendatory thereof. It provides as follows: "It shall be unlawful for any common carrier subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or

to subject any particular person, company, firm, corporation or locality, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever."

The Act further provides for the recovery of the damages sustained by any person through its violation either by proceedings before the Commission or by action in a federal court. It also makes the officers and agents of offending railroad companies liable to criminal prosecution.[1]

The provisions of the Interstate Commerce Act against discriminations refer only to those which are unjust and unreasonable.[2]

Construction of Interstate Commerce Act.

Whether there has been an unjust discrimination in violation of the second section of the Act, or whether an undue preference has existed contrary to the third section, are questions of fact and not of law. There is nothing in the Act which defines the terms "undue," "unreasonable," or "unjust."[3]

The purpose of the second section is to enforce equality between shippers, and it prohibits any rebate or other device by which two shippers, shipping over

[1] This has been changed by the Elkins law of 1903, which in effect, though not in form, is an amendment of the Interstate Commerce Act — the only important amendment since its passage. The Elkins law will be considered later.

[2] Interstate Commerce Commission *v.* Baltimore etc. R. Co. 145 U. S. Rep. 276.

[3] Texas etc. R. Co. *v.* Interstate Commerce Commission, 162 U. S. Rep. 219.

the same line, the same distance, under the same circumstances, are compelled to pay different charges. The phrase "under substantially similar circumstances and conditions," as used in this section, refers to the circumstances of carriage, and does not include competition between rival routes.[1] The fact that competition may make concessions necessary to obtain certain traffic does not justify personal discriminations.

The prohibition of the third section against any undue or unreasonable preference in favor of any person or locality is directed against unjust discriminations arising from the voluntary and wrongful acts of the carrier and not from natural causes. The existence of competition with other routes is a matter beyond the control of the carrier, and a preference between localities induced by substantial competition is not unlawful.[2]

Even in the case of traffic originating in foreign ports competition affecting rates must be considered in determining whether lower rates than are charged for domestic traffic, but which are necessary to obtain foreign freights, are undue or unjust. This is

[1] Interstate Commerce Commission *v.* Alabama Midland R. Co. 168 U. S. Rep. 145. Wight *v.* United States, 167 U. S. Rep. 512.

We shall later see that the same phrase in the fourth section — the long and short haul clause — has been given a much broader meaning. The different objects of the two sections justify the different meanings.

[2] East Tennessee etc. R. Co. *v.* Interstate Commerce Commission, 181 U. S. Rep. 18; Interstate Commerce Commission *v.* Alabama Midland R. Co. 168 U. S. Rep. 144; Interstate Commerce Commission *v.* Southern R. Co. 117 Fed. Rep. 741.

the principle established in the "Import and Export cases." Goods are often shipped from a foreign port to an interior city of this country upon a through rate of which the steamship company receives one portion and the railroad another. The portion obtained by the railroad for carrying the imported goods from the American seaboard to the inland point is generally much less — sometimes not half —the amount charged for carrying domestic goods between the same points. Similarly, goods designed for export shipped to an American port obtain a lower rate than is charged on similar goods sent to the same port for domestic consumption. The Interstate Commerce Commission held that these differences in rates constituted unjust discrimination against the domestic shipper upon the ground that the conditions affecting traffic from a foreign port could not be considered in determining whether similar circumstances existed. The Supreme Court of the United States, however, overruled the decision of the Commission, and held that all the conditions of competition, whether within or without the United States, must be considered.[1] The Supreme Court recognized the fact that in view of ocean com-

[1] Texas etc. R. Co. *v.* Interstate Commerce Commission, 162 U. S. Rep. 197. The difference between the rates on imported and domestic goods which sometimes exists is illustrated in this case where it appeared that the rate on domestic carpets, buttons, etc., from New Orleans to San Francisco was $2.88 per hundred pounds, while the total through charge on the same articles from Liverpool to San Francisco *via* New Orleans was only $1.07 per hundred pounds.

petition import traffic must be taken at low rates or not at all. And the same principles are applicable to export traffic, the conditions being reversed.[1]

The fourth section of the Interstate Commerce Act is especially designed to prevent local discriminations. It provides "that it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance."

Long and short haul clause.

This section makes a particular application of the general inhibition in the third section against the giving of any undue or unreasonable preference or advantage to any person or locality. It was separately stated in the Act on account of the popular feeling against the especial form of discrimination prohibited. It stated no new rule. Similar statutes had been in force in several of the States for many years before its enactment. It was, however, only included in the Interstate Commerce Act after long discussion, and in its present form, with the proviso

[1] The danger of these principles lies in their application. Discriminations in favor of the importer made without restraint may be large enough to drive the local shipper from the field. Ocean competition justifies discrimination, but the extent to which it should be permitted to go without regulation presents a serious question. See Report of Industrial Commission, Vol. XIX. p. 369.

attached,[1] is the result of a compromise between the Senate and the House — the latter favoring an absolute inhibition.

A statute absolutely denying to a railroad the right to charge the less for the longer haul, while seeming just at first glance, would contravene those elementary principles which we have considered. Charges could no longer be based upon the value of the service. A railroad must take business from competitive points at competitive rates; and if it cannot charge intermediate traffic proportionally more it must, often, go into bankruptcy. And if it must subsist upon the local traffic alone the same result is likely to follow. Instead of the railroads losing money on long hauls, and making it up on the short, whatever is received from through traffic above the additional expense of earning it is extra and goes that far toward maintaining the railroad. Inequalities in charges in favor of the long haul manifestly constitute discriminations between localities; but they are not unjust unless the differences in charges fail to correspond to differences in conditions.

The "long and short haul clause" as finally con-

[1] "*Provided, however*, that upon application to the Commission appointed under the provisions of this act, such common carrier may, in special cases, after investigation by the Commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property; and the Commission may from time to time prescribe the extent to which such designated common carrier may be relieved from the operation of this section of this act."

strued by the Supreme Court of the United States is not in conflict with these principles. It only prohibits those local discriminations coming within its provisions which are unjust. This result came about through the interpretation of the phrase "under substantially similar circumstances and conditions" which, by the language of the clause, must exist to make it applicable. The Interstate Commerce Commission for nearly ten years after its creation ruled that the competition of rival railroads did not constitute a dissimilarity of conditions, although it held that competition of water ways had that effect. The Commission declined to recognize any distinction between local and through traffic, and refused to exempt railroads under the proviso, except in "rare and peculiar" cases. The Supreme Court, however, in the Alabama Midland case[1] overruled the decision of the Commission and held that competition, whether of railroads or trade centres, is a factor in determining whether a similarity of circumstances and conditions exists.[2]

[1] Interstate Commerce Commission *v.* Alabama Midland R. Co. 168 U. S. Rep. 144.

[2] In East Tennessee etc. R. Co. *v.* Interstate Commerce Commission, 181 U. S. Rep. 12, the Court said: "But since the ruling of the commission was made in this case, it has been settled in this court that competition which is controlling on traffic and rates produces in and of itself the dissimilarity of circumstance and condition described in the statute, and that where this condition exists a carrier has a right of his own motion to take it into view in fixing rates to the competitive point. That is to say, that the dissimilarity of circumstance and condition pointed out by the statute which relieves from the long and

The ruling of the Supreme Court practically emasculated the "long and short haul clause." The principal reason why railroads charge less for long than short hauls is the existence of competition. Competition, however, makes the clause inapplicable. That which caused its enactment prevents its operation. But the decision of the Supreme Court was most fortunate. The enforcement of the Act as construed by the Commission would have deprived railroads of traffic at competitive points, and in the end thrown an additional burden upon the intermediate traffic. Its strict enforcement would necessarily have produced precisely the result it was intended to relieve against — injury to the local shipper.

The practical operation of the fourth section of the Act had been jeopardized before the decision of the Supreme Court upon the effect of competition. In several cases in the lower federal courts it was held that a joint line made up of two railroads was not "the same line" — within the meaning of the Act — as either of the roads composing it, and, therefore, that a lower charge for carriage on both

short haul clause arises from the command of the statute and not from the assent of the commission; the law, and not the discretion of the commission, determining the rights of the parties. It follows that the construction affixed by the commission to the statute upon which its entire action was predicated was wrong." See also Texas etc. R. Co. *v.* Interstate Commerce Commission, 162 U. S. Rep. 197; Louisville etc. R. Co. *v.* Behlmer, 175 U. S. Rep. 648; Interstate Commerce Commission *v.* Louisville etc. R. Co. 190 U. S. Rep. 273.

roads than over one or a part of one was not prohibited. It followed, therefore, that there were as many lines over the same rails as there were connecting roads to make through contracts. This interpretation was in force for several years, but was overruled by the Supreme Court in the Social Circle Case[1] which held that where several railroads unite to form a through line they continue to be separate roads, and that through rates and local charges may properly be compared to determine whether the "long and short haul clause" has been violated.

The principle of the "long and short haul clause" is probably more persistently ignored in the Southern States than in other parts of the country on account of the so-called "basing point system." Under this system certain places are established as basing points which obtain low rates. The rate to neighboring points is the through rate *plus* the local rate from the basing point to those places. The result is that goods may be hauled through a town nearer the origin of the traffic than the basing point and then hauled back again at a high rate for the local service. When competition — water or rail — compels the low through rate, the system is not in conflict with the Interstate Commerce Act and, as we have seen, is not an unjust discrimination.[2] The

[1] Cincinnati etc. R. Co *v.* Interstate Commerce Commission, 162 U. S. Rep. 184.

[2] Interstate Commerce Commission *v.* Louisville, etc. R. Co. 190 U. S. Rep. 273.

peculiarity of the system, however, and where it is at least economically wrong, is that, under it, a railroad not only gives low rates to competitive centres as basing points, but may arbitrarily establish any point on its line as a basing point and give it lower rates than other places. A town may be built up as a jobbing centre entirely by the favoritism of a railroad. The excuse for this practice is that it enables the created centre to do business in competition with places not on the road having water or water and rail facilities. A railroad, however, has no economic right to voluntarily prefer one place on its line to another. Artificial distinctions of the railroad furnish no basis for local discriminations by the railroad.

Elkins Law.

The statute known as the Elkins law passed by Congress in 1903, while not in terms an amendment of the Interstate Commerce Act, is in fact the most important amendment of the Act since its enactment. Its object is to prevent unjust discriminations by compelling railroads to observe their published tariffs.

The Interstate Commerce Act made only the officers and agents of railroad companies criminally liable for its violation. It reached the corporation only through civil proceedings. To prosecute the agent — perhaps a minor official — and let the principal go was so unfair as to hamper the practical working of the law. This defect was remedied by the Elkins Act, which makes the corporation itself

criminally liable as well as its agents. But as a corporation cannot be imprisoned, and as the punishment of all offenders should be the same, the penalty of imprisonment was entirely abolished.

Another change made by the Elkins law was made necessary by the impracticability of establishing the existence of a preferential rate. Under the original act the courts held that it was necessary to prove an *actual* discrimination—that one shipper paid more than others. If all shippers received cut rates there was no preference, however much the published rates were deviated from. Prosecutions were made difficult, for proof of a secret rate established only part of the case.[1] The Elkins law, however, makes the published rate the standard, and any deviation therefrom a misdemeanor. A variation from the tariff, rather than a discrimination between shippers, is the gist of the offence under the new law which, in this particular, reads as follows: "It shall be unlawful for any person, persons, or corporation to offer, grant, or give or to solicit, accept or receive any rebate, concession or discrimination in respect of the transportation of any property in interstate or foreign commerce by any common carrier subject to said Act to regulate commerce and the Acts amendatory thereto whereby any such property shall by any device whatever be transported at a less rate than that named in the tariffs published and filed by said carrier as is required by said Act."

[1] Report of Interstate Commerce Commission, 1903, p. 8.

The most important provision of the Elkins law is undoubtedly the provision which confers jurisdiction upon the United States Circuit Courts, by summary proceedings, to prevent discriminations and compel the observance of published rates. This remedy is comprehensive and must be effective if applied. The law provides in substance that whenever the Interstate Commerce Commission shall have reasonable grounds for believing that any common carrier is carrying freight at less than its published rates, or "is committing any discriminations forbidden by law," a petition may be presented by a district attorney, whenever the Attorney-General shall direct, upon his own motion or at the request of the Commission, to the United States Circuit Court sitting in equity having jurisdiction, whereupon it shall be the duty of the Court, after notice, to summarily and without formal pleadings inquire into the circumstances, and upon being satisfied of the truth of the petition to "enforce an observance of the published tariffs or direct or require a discontinuance of such discrimination" by appropriate process, which may be "enforceable as well against the parties interested in the traffic as against the carrier."

The Interstate Commerce Act practically put an end to open and undisguised discriminations. When the giving of a rebate became a criminal offence secrecy in details became expedient. For about a year after the enactment of the Act it was

really observed. The rate situation was greatly improved. But the improvement did not last long. Rate wars sprang up with their ever-accompanying discriminations in more or less secret and complex forms. Matters went from bad to worse and culminated in absolute demoralization between the years 1893 and 1895. The country was in a state of acute financial depression. Railroads were going into bankruptcy by the dozens. The worse off they were the harder they fought for business. There was little heed to published tariffs and laws against discriminations. The situation improved somewhat in 1896, when it was expected that Congress would legalize pooling. The Trans-Missouri decision in the following year, in which the Supreme Court held all traffic associations illegal, again precipitated unsettled conditions, and rate cutting and other personal discriminations became common.[1] The situation was not improved the next year. The Interstate Commerce Commission in their report for 1898, said: "From investigations conducted during the past year as well as from information which is perfectly convincing, . . . a large part of the business at the present time is transacted upon illegal rates. Indeed, so general has this rule become that in certain quarters the exaction of the published rate is the exception."

Effect of legislation against discriminations.

The return of prosperity following 1898 greatly

[1] Report of Industrial Commission, Vol. XIX, p. 352.

improved the rate situation. There was sufficient business for all, and published rates were fairly well observed. After that time and up to 1903 conditions were not materially changed. Published rates were generally followed, although rate cutting was not uncommon and at times existed upon a large scale. The enactment of the Elkins law, combined with continued prosperity, has largely put an end to personal discriminations. They have ceased to present the serious problem of the past. But the working of the law in hard times remains to be seen.

This summary of conditions since the enactment of the Interstate Commerce law demonstrates that in its original form it was entirely ineffective to prevent discriminations. It shows that, irrespective of statutes, discriminations existed in times of depression, when business was scant, competition active, and concessions thought necessary to obtain traffic. It also makes clear that in prosperous times, when the business of the railroads is brisk, discriminations do not prevail. When there is plenty of traffic there is no object in cutting rates to obtain it. Only the largest shippers, who can offer freight in train load lots to different railroads, can expect inducements in times of exceptional prosperity.

There is another reason why discriminations have decreased. Every combination of competing railroads, by consolidation, lease, or holding corporation, eliminates competitive elements which cause

discrimination. Community of interest involves concert of action, and removes the inducement to discriminating practices.

Personal discriminations are opposed to all good business principles and are wholly indefensible and vicious. They react against the railroad which grants them, and in the long run reduce its traffic. A realization of this fact has been brought home to railroad officials in recent years and has had some effect in stopping discriminations.

The present satisfactory situation with respect to discriminations has, therefore, been brought about through the working of several factors:

(1) Prosperity.

(2) The Elkins law.

(3) Railroad consolidations.

(4) A belated realization of the ultimately injurious effect of discriminations.

While the future alone can demonstrate whether prosperity or the Elkins law has had the greater effect in eliminating discriminations, the result of the passage of that law has been wholly good. With a few changes to make its meaning entirely clear — to bring within its provisions without question private cars and terminals — the Interstate Commerce Act, as now amended, seems to go as far as any law can go to stop personal discriminations. Its language is broad. The remedies it furnishes are comprehensive. If discriminations increase, the fault will be rather in its enforcement than in the law.

Excessive allowances to the owners of private cars amounting, as we have seen, to discriminations in their favor, undoubtedly come within the Interstate Commerce Act. It is not so clear regarding charges for icing and similar facilities furnished by private car companies to shippers, and in which gross discriminations are said to exist. The companies and the railroads contend that these charges are for private services which are not a part of the transportation furnished by the railroad and, consequently, that they are not affected by the provisions of the Act. Whether this contention be well founded or not it is clear that the charge for icing is practically a part of the transportation charge. The owner of perishable freight must use a refrigerator car and it must be iced. He is obliged to pay whatever charge is made for the whole service. A difference in the charge for icing is just as much a discrimination in the total cost of moving the freight in good condition as a difference in the rate. The effect upon the shipper is precisely the same in the one case as in the other. The railroad which permits private cars to operate upon its lines, or which itself operates refrigerator cars, should be responsible for the equality of the charges for all necessary facilities; and such charges and all discriminations with respect thereto, should be distinctly brought within the provisions of the Act.[1]

[1] Report of Interstate Commerce Commission, 1904, pp. 10–19.

The organization of terminal railroads for the purpose of obtaining discriminating rates should also be clearly legislated against. We have seen[1] that large manufacturing establishments sometimes make a terminal railroad out of yard tracks, publish a joint through rate, and obtain a division from the railroads carrying their product which amounts to a rebate in their favor. And these unjust discriminations are generally obtained by the great corporate combinations which need them least. They should be definitely brought within the Interstate Commerce Act. Even if the paper road be not engaged in interstate commerce, the real railroad which makes a discriminating division of the rate with it can be effectively reached.

The Interstate Commerce Act, as amended by the Elkins law, compels the observance of published tariffs. It prevents the cutting of rates and, with the tariff as a standard, makes equal treatment of all shippers imperative. It does not effectively reach preferences created *by* the tariff, or discriminations which the published rates are formed to carry out. The problem of changing published rates by governmental authority is, however, considered elsewhere.[2]

[1] See page 102.

[2] See Chap. X.

CHAPTER VI

COMPETITION AND COMBINATION

It has been a theory since railroads began that competition acts as a natural regulator of their charges. This is partly true and partly untrue. Indirect competition does tend to keep down rates. Direct competition operates only in spots. It reduces some charges for a while, but generally ends in combination. The operation of the former is beneficial to the public. The effect of the latter is generally such that some form of rate agreement is preferable. It is evident at the outset then that there are two forms of competition affecting railroad rates:

(1) Indirect competition.

(2) Direct competition.

Combination is the opposite of competition. When the one is free the other does not exist. Just to the extent that competition is restricted combination increases in efficacy. And the three steps in the combination movement in this country — from slight restriction toward elimination — have been

(1) Agreements to maintain rates.

(2) Pools.

(3) Consolidations.

Indirect competition may exist between railroads thousands of miles apart and running in different directions. It is competition for markets. The interests of the territory through which it runs are the interests of the railroad. Development of business means increase in traffic. The country cannot grow unless it can sell its products in the markets. It cannot sell them unless they can be hauled to market at rates which will permit them to compete with the products of other sections. Railroads running to the Dakotas and the Northwest must make the rate on wheat to Chicago low enough for Dakota wheat to compete with wheat from Iowa and Nebraska. Rates on cotton from Texas must enable it to sell in the North on a competitive basis with cotton from the nearer South. Moreover the principle is not confined to natural products. A road running south from Chicago must make a rate to Southern points which will enable Chicago jobbers to ship in competition with jobbers in New York, and *vice versa*. The products — natural and manufactured — of the different sections of the country must be carried to the great commercial centres at rates which will enable them to compete. And the centres must be able to distribute to consumers upon an even basis. Just so far as the railroad fails to make charges which will enable its territory to market its products, just so far will its traffic be curtailed. Indirect competition.

Competition for markets is not confined to this

country. The railroads from the Northwest and the steamship lines must lay down wheat in Europe in competition with wheat from Russia and the Argentine Republic. The products of the factories of New England must be carried to Asia at rates which will enable them to compete with the products of the British mills. If the rates are so high upon the American grain or goods that they cannot compete they will not be shipped.

Indirect competition of this character acts as a regulator of rates. What the traffic of its territory is able to bear and continue to bear marks the limit of the charge the railroad can make. And as the charge is reduced from the limit the traffic will — other things being equal — tend to increase.

This competition underlies other forms of competition, is far-reaching and wholly beneficial to the public. It must continue; for it cannot be eliminated in this country until all the transportation systems combine, and it must exist with respect to foreign markets until consolidation becomes world-wide.

Direct competition is the competition of carriers operating between the same *termini*. While no defined line can be drawn, direct competition may be said to be of two kinds:

Direct competition.

(1) Of circuitous routes.

(2) Of direct lines.

I. Competition of circuitous routes exists when railroads or rail and water lines between the same *termini*, but some of which take roundabout courses,

strive to obtain the same traffic. Thus wheat from Nebraska to Liverpool may be carried by a trunk line directly to New York and thence by steamer; or it may be hauled to New Orleans or other Gulf point and take the steamer there. Similarly Western cities may receive New York shipments by direct line or *via* Southern ports. Throughout the country goods are being hauled many hundreds of miles north or south before moving directly to their destinations. When freight is once loaded upon cars it makes little difference in expense whether it be hauled five hundred or a thousand miles. The circuitous route is often an effective competitor of the direct line for traffic which does not require quick movement.

Competition of circuitous routes, as a rule, affects only through and long distance traffic between important points. It acts as a regulator of the charges it affects and — from the very fact that the routes are circuitous — cannot readily be eliminated by combination. But it touches comparatively few communities, and is unimportant compared with the competition of direct lines.

II. Competition of direct lines is the competition between carriers operating between the same *termini* in direct — but only direct as distinguished from roundabout — lines. This form of competition immediately affects the rate in the community where it exists, ultimately acts upon the charge in the community where it does not exist, may ruin the

railroads, and is of vital interest to all shippers. We will now consider its consequences, as well as the consequences of all direct competition.

Effect of direct competition.

A railroad, as we have seen, is in some places a complete monopoly, in some places a partial monopoly, and in others not a monopoly at all. Conversely, unrestricted competition exists at some stations, limited competition at some, and no competition at others. Unrestricted competition forces down rates. Charges upon competitive traffic are likely to be unremunerative. When they are so low as to pay only the proportionate share of operating expenses, non-competitive traffic must bear the whole burden of interest charges and dividends, if any are paid. The first effect of railroad competition, then, is to make rates unequal — to make non-competitive traffic pay more than competitive traffic. This produces low through rates but high local charges.

Let us now see whether direct competition acts as a regulator of rates. The theory that competition has this effect is based upon two assumptions: (1) that the prices of goods are proportional to the cost of production; (2) that when the prices of goods fall below the cost of producing them production will decrease. These assumptions are well founded with respect to ordinary forms of industry. When the supply of goods is limited and prices are far above the cost of production, outside capital will be attracted, production will increase until the demand

is supplied, and then prices will fall to a normal figure. When prices have fallen below the cost of production, capital will be withdrawn, production will be limited, and prices will rise to the normal standard again. This theory works out, partially at least, in the case of indirect competition for markets. When the railroad rate on wheat to Chicago is so high that the competitive price will not leave a profit over the cost of production *plus* the transportation charge, no wheat will be shipped and little raised — assuming that Chicago is the only available market. When the rate is reduced and a profit is in sight, shipments will be made and wheat growing will increase. Competition for markets tends to regulate charges, because the amount of the rate may wholly determine whether the road will have any competing products to haul.

But the theory that competition regulates charges does not hold good with respect to direct railroad competition. The two assumptions upon which it is based cannot be made. (1) Charges for railroad services — as we have seen — are not and cannot be in proportion to the cost of rendering them. The expenses of a railroad are largely independent of the volume of traffic. Business may be competed for up to the limit of out-of-pocket expense. Rates which would bankrupt the road if applied to its whole traffic may be taken with profit if otherwise the shipments would go elsewhere. (2) When rates for railroad services fall there is no such thing

as a withdrawal of capital. As we saw in examining underlying principles, a railroad represents a permanent investment. It is good for a railroad and nothing else. Competition may force down rates and the road go into bankruptcy, but it does not cease operations. Its ownership may change hands through foreclosure, but the struggle for business goes on. The deeper a railroad is involved the more wildly will it endeavor to obtain traffic and the lower will it cut rates. Anything over the mere cost of haulage is better than nothing at all. Unrestricted competition among railroads instead of acting as a regulator of rates often produces rate wars, discriminations, and insolvency.

There is another economic theory — that competition tends to equalize prices. But this does not work in harmony with the law of increasing returns which, as we have seen, applies to railroads and influences railroad competition. The more traffic a railroad moves the cheaper it can move it, and the greater the inducement to obtain it. Up to the point where additional traffic requires additional facilities, an increase of business shows profits at an increased ratio. Two million units of traffic will return more than double the profits of one million units. Rates may be considerably reduced and still an increased business be profitable. There is, therefore, every inducement to the railroad officials, both of the solvent and insolvent road, to get extra tonnage. There is an especial triumph in getting

it away from another road. Competition to obtain it does not make rates equal. It rather makes for rate cutting, rebates, and other forms of discrimination.

In competition in general, the strongest competitor controls the situation. In railroad competition, the weakest road is often the controlling power. The bankrupt road which has repudiated its interest obligations has nothing to lose by reducing its rates to any figures above the actual out-of-pocket expense. It must have business upon some terms. The prosperous road must meet the rate of its competitor or lose its traffic. Unless it can make up the loss from its non-competitive traffic, it is not unlikely, by meeting the rates of its rival, to be driven into the same financial condition as its rival. Similarly, the most circuitous and indirect road is often able to dictate conditions to the most direct line. The indirect route — possibly a water and land route — can carry the freight if it can obtain it. It would not naturally obtain it all, and all it does obtain is clear gain. In order to obtain traffic it must offer inducements to shippers. It may reduce rates almost to the cost of haulage and still be a little to the good.

Whenever competition compels a railroad to accept unremunerative rates the loss must fall somewhere. If charges at non-competitive points remain unchanged it falls upon the railroad. If the reduction of rates go far enough and continue long enough

bankruptcy will result. On the other hand, if local rates are raised when they are cut at competitive centres the loss falls — and most unjustly falls — upon the local shipper. As a rule, rate wars injure both the railroad and the non-competitive traffic. The competitive principle in railroading injures the railroad, and works unfairly to the public because it cannot work equally.

Combination the alternative of competition.

The results of competition being injurious the only course for the railroads is to stop competing. But they cannot stop unless they agree to stop. Combination is the alternative of competition.

Here, however, we are met with the objection that agreements of railroads in restraint of competition were illegal at common law. The common law rule undoubtedly was, "that every combination of *quasi*-public corporations which, without statutory authority, does or may deprive the public of the benefits accruing from separate control and management, is against public policy."[1] But while agreements to maintain rates may be illegal in the sense that they are not enforceable, they were not — until the enactment of recent statutes — unlawful in the sense that they were punishable. The courts took the parties to such agreements as they found them, and as they found them left them, without assistance in any matter growing out of the illegal enterprise. But the courts could not go further and inflict a penalty. The railroads were at liberty to enter into

[1] *Law of Intercorporate Relations*, sec. 359.

rate agreements, but they could not enforce them and could withdraw from them at any time.

Still, although agreements to maintain rates were not enforceable, the effects of competition were such that the railroads — before the prohibitory statutes were passed — freely entered into them. But before examining their different forms let us consider another type of agreement growing out of railroad competition and often constituting the *consideration* for the rate agreement — the differential agreement.

A differential may be described as a difference in rates established by agreement of competing carriers upon (1) traffic between the same points, or (2) traffic from a common point to different points, but having the same ultimate destination. Differentials.

We have seen that the indirect and circuitous route is often able to dictate terms to the direct line. It would not obtain any traffic at all without effort. Concessions to shippers would be necessary to draw business. Rate cutting would result, and the indirect line to which the traffic was really extra tonnage could stand reductions better than the trunk line whose heavy business would be affected. To avoid these results differentials were often granted to the indirect roads — in consideration of agreements to maintain rates — allowing them to charge *lower* rates than others to the same points of destination. They were thus enabled to attract a share of the traffic. There were two classes of roads — "standard

lines" and "differential lines." Differentials of this character were, however, practically abandoned about ten years ago except for freight routed *via* ocean and rail and Canadian lines.

The second form of differential has a different origin. Several railroads may be engaged in hauling grain or flour from an interior centre to different seaboard cities for export to foreign countries. When the ocean rate to one port is higher than to another the rail rate to that port must be reduced or the railroad serving it will obtain no traffic. Ocean rate *plus* rail rate must be the same upon each route if there is to be a division of the traffic. One port may offer better facilities for loading and unloading and other advantages. Disadvantages must be compensated for by reduced rates. It follows, therefore, that the railroad running to the city having the greatest ocean rate and the least advantages will be driven by competition to cut rates the deepest to obtain business. This will result in a rate war or an agreement permitting the least favored road to charge a rate sufficiently reduced to attract what is considered to be a fair share of the traffic — in other words, a differential. Thus export traffic from Chicago may be moved *via* Boston, New York, Philadelphia, or Baltimore. Prior to 1876 the railroads running to those cities were in active competition for this traffic, and disastrous rate wars resulted. At that time an arrangement was entered into whereby taking the

Chicago-New York rate as a standard, the rate to Boston was the same; the rate to Philadelphia, two cents per hundred pounds less, and the rate to Baltimore, three cents less. In other words Boston has a concession over New York of the longer haulage at the same rate, and the differentials in favor of Philadelphia and Baltimore are two and three cents respectively. These differentials have recently been modified in some respects by the Interstate Commerce Commission acting as arbitrator. On the whole, however, the Commission held that they were fairly adjusted to meet competitive conditions.

Local differentials are not local discriminations, as we have used the latter phrase. Specifically, a local discrimination is an unequal adjustment of rates upon a single road. A differential is the result of an unequal adjustment of rates with respect to competing points on different roads. In a broad sense, however, a locality from which traffic is diverted by artificially high rates is discriminated against, and unjustly so when rates are made higher and the differential greater than is warranted by conditions of competition.

And now we will return to the rate agreements which the differential has often induced the railroad to enter into.

The earliest attempt of the railroads to avoid the effects of competition took the form of simple agreements to maintain rates. Prior to the early

seventies these agreements were common and were entered into openly. They were in slightly different forms — some containing a provision for an umpire to settle disputes — and usually were executed by the general freight agents of the competing roads. Agreements with respect to passenger traffic preceded those relating to freight.

Agreements to maintain rates.

These agreements worked well so long as they were lived up to. Rates were maintained and ruinous competition avoided. They failed — like the similar agreements of competing manufacturers — because there was too much incentive to break them and there was no authority to enforce them. They were based wholly upon confidence. Whether they were observed depended largely upon subordinate officials whose confidence in a rival road was readily impaired. When they believed that other roads were making concessions to obtain traffic, they made concessions themselves. An agreement which each party fails to quite live up to is often worse than no agreement. Its effect is to substitute secret competition for that which is open, and the former is worse than the latter.

If agreements to maintain rates could be made lawful and enforceable, many of the difficulties attending them would be obviated. In fact, under present conditions — which may render a more effective method inexpedient — enforceable rate agreements may be the best means of dealing with railroad competition. The difficulty, however, with

all rate agreements, whether enforceable or unenforceable, is that they do not remove the *incentive* to competition. The railroad officials soon recognized this in the case of the early rate agreements. They saw that the way to avoid the effect of competition was to remove the inducement to compete. With this object they resorted to *pooling*.

A railroad pool is an agreement between competing railroads to apportion competing business. More precisely, it is an arrangement made by several railroads competing for business to allot to each a stated percentage of the whole competitive traffic, or of the receipts thereof, together with a mutual guaranty that each road shall receive its share. The purpose of pooling is to remove the incentive to competition. A road will hardly cut its rates to get away another's traffic if there is nothing to be gained by doing so.

Pools.

Railroad pools are of two kinds:

(1) Traffic pools.

(2) Money pools.

I. A traffic or tonnage pool is an agreement whereby each member is guaranteed to receive and can receive only a stated percentage of the competitive traffic. Taking a series of years, the percentages of freight carried by competing and well established lines between two important points will not vary greatly. The distribution of business is fairly constant. It is, therefore, easy for the makers of the pool to determine the proportion of the traffic

which each member should receive. A pool to be permanent should be based upon natural percentages. A traffic pool only applies to competitive traffic and sometimes only to through competitive traffic. Local business is unaffected. In fact, rate wars with regard to local competitive traffic have taken place between members of a through traffic pool. When the time for adjusting accounts approaches, if any member have received less than its allotment of the traffic, sufficient freight is diverted from a road which has received in excess of its percentage to make up the deficiency. Freight diverted for this purpose is, if possible, freight not specially routed. But sometimes it is necessary to forward contrary to the preferences of shippers. This makes trouble, and was so great an objection to the traffic pool that it was largely abandoned, even before the enactment of the statute against pooling.

At one time an attempt was made to obviate this objection. Arrangements were made with large shippers to act as "eveners." These shippers by forwarding their freight by one road or another as was required evened up the traffic of each road to its allotted percentage. The "eveners" were recompensed by receiving rebates on their own shipments and sometimes on shipments made by others. The "evener" plan began in the live stock traffic. It is said also that the Standard Oil Company was a great "evener." These concessions to the very largest shippers constituted most unjust discrimina-

tions in favor of those who needed them least. The evener plan was abandoned about 1879.

II. A money pool is an agreement whereby each member is guaranteed to receive and can receive only a stated percentage of the receipts from competitive traffic. This type of pool — called a joint purse — has been common in England. It may be based either upon gross or net earnings. The percentages of the members are, of course, determined by past earnings, but they take their allotments entirely irrespective of actual earnings during the pool's existence. But as one road might incur extra expenses in moving a far greater bulk of traffic than its proportion of the earnings called for, it was customary, during the pooling period of the American railroads, for each road to retain a third or a half of the receipts from the pooled business to cover the actual expenses connected therewith. The remainder of the receipts went into the pool. In some cases the roads were permitted to retain but a very small percentage in order to avoid the temptation to compete for that alone. A moiety of the earnings might have been attractive to a road in need of funds.

The money paid into a money pool is periodically distributed by the official in charge according to the stipulated allotments. In this type of pool each road takes all the business offered and conducts its affairs independently of the other members, except as it pools its receipts in whole or part.

The advantage of the money pool over the traffic

pool is that it obviates the necessity for diverting traffic from the route designated by shippers or for employing "eveners." If shippers are receiving favors from a particular road they are especially likely to object to any diversion of their shipments. The difficulty with the money pool lies in the reluctance of a railroad to pay over to a competitor any part of the money which it has earned. It is much easier to receive to make up one's own deficiency than to give to supply the shortage of others. This difficulty was, however, largely avoided by providing that members should pay their receipts into the pool in advance, instead of waiting until the expiration of the stated period to see how the different members stood.

An objection to the money pool as it existed in this country, from a public point of view, was that it was sometimes used, not as a means of pooling business, but as a method of hiring weak roads not to compete. There was another objection to both types of pools from the railroad standpoint. They did not wholly eliminate the inducement to compete. As they usually ran for a comparatively short time, there was always an incentive to obtain additional tonnage in order to make a good showing for future allotments. On the other hand, this spur to look out for the future was beneficial from the public point of view. One of the serious difficulties with pooling was that after joining a pool a railroad had little inducement to improve its facilities — that

it tended to stagnation. But with short term pools each road had to keep up its service to hold its existing percentage when the new allotment should be made. It could legitimately improve its position to claim a larger share only by offering increased advantages and attracting new business.

III. The primary objection of the public to pools was that they were (1) designed to increase charges, and (2) had that effect. The purpose of a pool, however, is to maintain rates, not to establish them. Rates may be fixed by wholly outside causes, such as water competition. A pooling arrangement may continue for a term during which hundreds of changes in the tariff may be required. While the effect of a pool is to make rates uniform as well as stable, rate-making is distinct from pooling. The pools were not designed to increase rates and they did not have that effect. In the seventies and early eighties, when pools were most prevalent in this country, rates steadily declined.

Neither did the pools materially check the decline in rates. Of course, in so far as direct competition tended to accelerate the decline, pooling, by eliminating that competition, tended to stay it. But as we shall see, direct competition was not an important factor in causing the general decline in charges.[1] It acted only upon competitive rates and tended rather to keep local charges up than down. Rates steadily declined under the pooling arrangements, and it

[1] See Chap. VII.

cannot safely be asserted that they would have declined much faster if the pools had not existed. In fact, the pools by preventing ruinous competition enabled the railroads the better to avail themselves of those physical improvements which were the most important factors in bringing about the decline in charges.

IV. The first important railroad pool in this country was the Chicago-Omaha pool which was formed in 1870. The Northwestern, the Rock Island, and the Burlington roads which connected Chicago and Omaha, were not far different in financial means and had about equal facilities for handling the business. The traffic between the two points was important. It was obvious that no one road was in a position to get the others' business away by cutting rates—that all were equally capable of standing competition. All the conditions pointed to an equal division of the traffic — to co-operation instead of competition. Accordingly, a pooling agreement was made allotting to each road a third of the traffic. This pool was successfully maintained all through the Granger agitation and was merged into the Western Freight Association in 1884.

Another early Western pool was the Southwestern Railway Rate Association, established in 1876. This pool related to traffic between Chicago and St. Louis and Mississippi River points. It was somewhat similar to the Chicago-Omaha pool, although there were more parties to it and it endeavored to fulfil

other functions than those of a mere pool. It existed for a few years and was only partially successful.

An early Eastern pool was that formed by the railroads engaged in producing and carrying anthracite coal to the Atlantic seaboard, which was organized in 1872 and continued in its original form about four years. This pooling agreement restricted the amount of coal to be mined, and apportioned the production and traffic in stated percentages among the roads participating. It was followed by others of a similar nature which were more or less effective.

Probably the most effective and comprehensive pool established in this country was that organized in the Southern States in 1875, called the Southern Railway and Steamship Association. This pool first covered the business between Southern points and the Eastern cities, but later took in Western traffic. Its members were both railroads and steamship lines. It was a money pool, the roads participating paying eighty per cent of their earnings from the competitive traffic into the pool for distribution. This association was much more than a mere pooling agreement. It fixed rates, made classifications, and established a clearing-house for the settlement of joint-traffic accounts. It was directly controlled by a general commissioner with large powers acting under the supervision of an executive committee. It was well managed from the start, and continued in successful operation until the abolition of pool-

ing in 1887, when its functions were necessarily changed.

Trunk line pools followed the development of trunk line traffic.[1] Before steel rails came into use with the resulting larger cars and heavier engines, the great bulk of traffic between the West and the East went by water routes, of which the Erie Canal was the most important. The railroads could not meet the water rates. But with the improved facilities — employed about 1870 — the railroads were able to make great reductions in rates, and, finally, to attract the greater part of the business of the canals. Through traffic proved to be profitable under the changed conditions, and rates were deeply cut by the competing roads to obtain it. New roads made connections and came into the field. Violent rate wars raged at different times prior to 1877. Then an association of the trunk lines and their connections was formed under the name of the Joint Executive Committee. This first related solely to west bound traffic. In 1879 east bound traffic was included. This Committee dealt with the differentials which we have seen still exist between the Atlantic cities, apportioned the competitive traffic, and had general supervision over the pooled business. It was at first a traffic pool, shipments being diverted to make up the allotments. In 1885, however, it was reconstructed as a money

[1] The term "trunk lines" is applied to the railroads operating between the Atlantic seaboard and the Middle West.

pool with monthly deposits and settlements. The Joint Executive Committee continued as an effective pooling organization until 1887 when the pooling feature was necessarily eliminated.

While the pools mentioned were the most important, many other pools existed in the United States in the years preceding 1887. Practically every railroad which sought for competitive business was in one or more pools. Thus it was stated in 1878 that the Illinois Central Railroad was then a member of twenty different pools in Illinois and Iowa alone. Pooling was sometimes effected by means of simple pools. More often traffic associations were formed which attempted to regulate generally the relations between their members. But the pooling arrangement was the important feature of all these associations and the real reason for their existence.

V. In the early eighties a strong public sentiment against pooling arose. It was believed that pools kept up rates and, in eliminating competition, injuriously affected the public. Statutes were enacted in several states prohibiting pooling and finally in 1887 Congress, after much hesitation, inserted an anti-pooling provision in the Interstate Commerce Act then adopted.

Section 5 of the Act provides: "It shall be unlawful for any common carrier subject to this Act to enter into any contract, agreement, or combination with any other common carrier or carriers for the pooling of freights of different competing rail-

roads, or to divide between them the aggregate or net proceeds of the earnings of such railroads or any portion thereof; and in any case of an agreement for the pooling of freights as aforesaid, each day of its continuance shall be deemed a separate offence."

The violation of this provision, as well as of the other provisions of the Act, was made a misdemeanor, and pools were effectually put an end to. The railroads were driven to other devices to avoid the effects of competition, if any could be found. As we shall see, the traffic associations, with the pooling arrangements eliminated, continued in existence.

VI. The Interstate Commerce Act attempted the impossible. Competition cannot be enforced and discriminations prevented at the same time. The anti-pooling clause is irreconcilably at variance with the provisions against discriminations. The statute presents the anomaly of prohibiting discriminations and, at the same time, prohibiting the most available means of preventing them. Legislation has never yet permanently prevented both pooling and discriminations, except as pools have been followed by closer combinations. The Interstate Commerce Act was no exception to the rule. While pooling was substantially abandoned upon its passage discriminations continued, as we have seen, to an even greater extent than before. And when, at a later period, discriminations diminished, it was largely because consolidations and community of interest

had eliminated competition in certain sections to a greater extent than was ever possible under the pooling system.

These principles are well recognized in foreign countries. Discriminations have only been prevented by consolidations and pooling. Pools are not treated as agreements beyond the pale of the law. They are legalized and made enforceable. There are well organized systems of pools in most of the Continental countries of Europe and, in some cases, the governments themselves enter into pools with respect to government lines and private lines.

The prohibition of pooling by the Interstate Commerce Act was most unfortunate. The legislation should have been in the opposite direction. Pools should have been made lawful and enforceable, and then regulated. Various measures concerning pooling have been proposed during the last ten years. Some have merely removed the prohibition. Others have made pooling lawful, but provided for the submission of the pooling agreement to the Interstate Commerce Commission. Others have provided for supervision by the Commission, but with the right of appeal to the courts. It is now late for any such legislation. Consolidations have largely divided the field and made pools unnecessary.

Still consolidations do not cover the whole field, and in providing an effective method for dealing with competition and its effects, one of the incen-

tives to further consolidation would be removed. On the whole, legislation legalizing pooling seems expedient.

Rate Agreements since Prohibition of Pooling.

As we have seen, the statute against pooling put an end to that form of combination. But being specifically directed against pools, it left agreements to maintain rates in the same condition as before. The traffic associations, therefore, continued in existence with rate agreements in the place of pools. Various methods were devised for enforcing the provisions of these agreements.

In the South, the Southern Railway and Steamship Association existed for several years with the pooling feature eliminated. It sought to maintain rates by imposing fines upon its members for infractions of the rate agreement. It continued until the business depression of 1893 when rates could not be maintained, and it was dissolved. Its place was taken in 1895 by the Southeastern and Mississippi Valley Association which, in turn, was later superseded by other associations. These associations in modified forms still exist. Pools for the division of the cotton traffic have also existed for many years in the Southern States. In these pools an arrangement is made between the railroads competing at commercial centres for export cotton, whereby the competition which would necessarily follow fluctuating ocean rates is avoided. The roads merely agree to accept each day upon all routes the

lowest rate quoted upon any route and to take the traffic in agreed proportions.

In the territory west of Chicago, the adoption of the anti-pooling clause left railroad relations in a chaotic state. The old pools were disrupted and several new associations which were formed proved failures. In 1891, however, the Western Traffic Association was formed as a sort of federation of several associations covering traffic in different territories. One of these subsidiary organizations was the Trans-Missouri Freight Association, which had been formed in 1889 "for the purpose of mutual protection by establishing and maintaining reasonable rates, rules, and regulations on all freight traffic, both through and local." In 1892 a suit was instituted by the United States against this association, charging that it was a combination in violation of the federal anti-trust statute of 1890, called the Sherman law, which provides that "every contract, combination in the form of trust or otherwise, or conspiracy in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal." The decisions of the lower courts were in favor of the Association, and the case was appealed to the Supreme Court of the United States. Two questions were presented: (1) whether the anti-trust statute applied to railroads; (2) whether the Trans-Missouri Association violated its provisions. The Supreme Court answered both questions in the affirmative, and held,

broadly, that agreements between competing railroads to maintain rates — whether reasonable or unreasonable — are against public policy and contrary to the federal statute.[1]

In tracing the history of the rate agreements of the trunk lines since 1887, we meet another decision of the Supreme Court fully sustaining and supporting its Trans-Missouri decision. Upon the passage of the Interstate Commerce Act, the trunk lines abandoned pooling and adopted a system of differentials in favor of the weaker roads by which they were able to secure their share of the traffic. The Grand Trunk Railway, however, was not a party to the differential agreement, and a serious rate war followed. In 1889 a new agreement was made to which the Grand Trunk was a party. This agreement provided for the payment of money subsidies to the weaker roads in lieu of the diversion of traffic required in pooling. The Trunk Line and Central Traffic Associations supervised different portions of the territory. In 1896 these associations were superseded by the Joint Traffic Association. The nine leading trunk lines were represented in the permanent board of this association, and a failure to comply with its recommendations was punishable by a fine of $5000. Before the Joint Traffic Association got fairly under way a suit was instituted by the United States against it

[1] United States *v.* Trans-Missouri Freight Ass'n, 166 U. S. Rep. 290.

charging: (1) that it was in violation of the anti-trust statute, and (2) that it contravened the anti-pooling provision of the Interstate Commerce Act. The case came to the Supreme Court of the United States, where an attempt was made to distinguish it from the Trans-Missouri case upon the ground that in the latter case power was conferred upon the association to actually make rates, while the Joint Traffic Association merely adopted rates already in force. The Supreme Court, however, held that the Joint Traffic Association violated the anti-trust statute, but did not pass upon the question whether it was also a pool.[1]

The decisions in the Trans-Missouri and Joint Traffic Association cases show that under the Sherman law the right of railroads to co-operate is confined within very narrow limits. They have no right to enter into agreements to maintain rates in any form. And yet some measure of co-operation with respect to rates is absolutely necessary to carry on railroad business. If each railroad should make its own classification, and fix its rates without regard to the charges of its competitors or the charges of other roads serving competing cities, discriminations would become the rule, and the attendant confusion intolerable both to the railroads and shippers. Modern business could hardly be carried on under such conditions. The road which happened to make the lowest rate would get all the traffic. Ac-

[1] United States *v.* Joint Traffic Ass'n, 171 U. S. Rep. 505.

cordingly, while the anti-trust decisions have been regarded in the letter, they have been evaded in the spirit. Informal understandings have taken the place of formal agreements. Each road makes its own rates, but rates upon competitive business are only made after conference between competing roads. These conferences undoubtedly often take place at the meetings of the traffic associations, which still exist all over the country, and which constitute convenient vehicles for the interchange of views. There are "gentlemen's agreements" that the result of the conferences shall be observed, and these agreements have been lived up to. In fact, in the prosperous times which have existed since they were rendered it is undoubtedly true, as said by the Interstate Commerce Commission in its report for 1901, that "the decisions of the United States Supreme Court in the Trans-Missouri case and the Joint Traffic Association case have produced no practical effect upon the railway operations of the country. Such associations in fact exist now as they did before those decisions, and with the same general effect."

But if the decisions of the Supreme Court have been ineffective in the past, it does not follow that they will not be most effective in the future. Good times began in this country very soon after they were rendered, and have continued ever since. The railroads generally have had all the traffic they could move. There is no object in competing for business when it can be obtained without compe-

tition. Informal understandings and "gentlemen's agreements" answer their purpose when there is little to be gained by evading them. But it remains to be seen how they will operate in times of depression when there is not enough business to go around, and when the weak roads *must* have traffic. The early agreements of this character proved to be merely ropes of sand.

Fluctuating and unequal rates necessarily result from the operation of railroad competition. They benefit the few who obtain the low charges; they injure the many who pay the correspondingly high rates. Stable and equal rates, which are beneficial to the people as a whole, can only be obtained by eliminating competition. Whether or not, therefore, it be expedient to legalize pooling, agreements to maintain rates should be made lawful and enforceable. At the very least, the federal anti-trust statute should be modified in its effect upon railroads. When competition is eliminated by lawful agreements and stable and equal rates are maintained, the only other requirement is that they shall be reasonable and just. And rates which are both stable and equal and reasonable and just may be obtained by authorizing the railroads to eliminate competition, and by regulating their charges when regulation is necessary. With no legislation whatever, one of these results seems inevitable:

(1) Unrestricted competition with its attendant discriminations and evils.

(2) Agreements based wholly upon confidence — which fail when confidence is impaired and lead to result 1.

(3) Consolidation — which generally is lawful but which is the least desirable form of combination from the public point of view.

The present laws tend to produce in the worst form the very results they were designed to prevent.

The anti-pooling clause in the Interstate Commerce Act was undoubtedly influential in bringing about railroad consolidations. When the railroads were prevented from forming pools, they naturally looked for some other method of avoiding the effects of competition. Consolidation was lawful, except in a few States. Consolidations excluded competition, and many took place. But the roads had other alternatives. Agreements to maintain rates, while extra-legal, were not prohibited; and, as we have seen, many railroads merely substituted such agreements for the pooling arrangements.

Consolidation.

The decisions of the Supreme Court construing the Sherman law limited the field of action. The roads could evade the law by informal understandings; or act within the law and consolidate when the statutes permitted.[1] Some took the one course and

[1] This is upon the assumption that the consolidation of competing railroads by means of technical consolidation, purchase or lease, when authorized by State statutes, is not in contravention of the Sherman law. That the practical consolidation of such roads by means of a

some the other. But this was not the only reason — perhaps it was not the most important reason — why consolidations took place. The Supreme Court decisions were rendered just before the unexampled wave of prosperity struck this country in 1898. With prosperity came the tendency in all branches of industry to co-operate. Industrial combinations of unprecedented magnitude took place. The same tendency operated upon the railroads. Railroad consolidations would undoubtedly have occurred had the decisions of the Supreme Court been the other way. But the tendency to consolidate being coincident with the necessity for consolidating, railroad consolidations kept pace with industrial combinations. The railroad map of the United States was made over. Great railroad systems took the place of the former independent roads. A division of the entire field of the United States seemed a probability.

It appears, therefore, at the outset that the effect of the anti-trust statute, as construed by the Supreme Court — like the effect of the statute against pooling — was, so far as it went, to eliminate that which it was intended to protect. Combinations which could only restrict competition were prohibited. Consolidations which, in the territory covered, excluded the possibility of competition flourished.

The character of the consolidations since 1898

holding corporation is prohibited, was settled by the Northern Securities decision.

indicates that they were formed primarily to put an end to competition. Earlier consolidations, as a general rule, were for the purpose of strengthening the position of the principal road by branching out into new territories, extending existing lines, and taking in feeders. Expenses of operation were thus reduced, traffic increased, and more efficient service made possible. Recent consolidations have been those of competing lines. These consolidations, like the earlier, afford opportunities for economies in operation. Duplications in service may be eliminated. But these economies are limited by the fact that when two great roads unite they must be operated through many different departments as before. The saving is often proportionally less in a large consolidation than a small one.

Consolidation, like every form of combination, by excluding competition, prevents discriminations. The elimination of the power to compete eliminates the inducement to discriminate. When a railroad controls all the traffic, there is no necessity for granting rebates and concessions to particular shippers. Consolidation, therefore, tends to make rates equal.

If consolidation tended to make rates reasonable and just, as well as equal, its effect upon charges would be wholly good. The effect of economies in operation should be to lower rates. On the other hand, consolidation makes it very easy to advance rates. An advance of ever so little upon the vast volume of traffic carried by a consolidated

system largely augments receipts and is hardly felt by ordinary shippers. Under a pool or rate agreement several minds must meet to make the advance. When the official of the consolidated system has only the needs of his own road to consider, and has only to agree with himself, he is not unlikely to think that a slight advance will do his road more good than it will do shippers harm. The decline in rates which had been going on for thirty years was checked, and an advancing tendency first shown, during the era of consolidation. We are not now considering whether the advance — which was slight — was justifiable. We merely note that it was made entirely feasible by the conditions then existing.

This point, however, must not be passed over. That consolidation may lead to advances in rates is true only of through rates. Local rates are not affected by consolidation. The railroad serving the intermediate station is usually a monopoly anyway; and local conditions are not changed if it become a part of a greater monopoly. Local rates are not likely to be increased by consolidation; and the interest of the railroad to make rates to develop business along its line will not, as a general rule, be diminished.

But, while intermediate stations are usually unaffected by consolidation, it cannot fail to materially affect localities especially favored by a constituent road. When a railroad is identified in interest

with a particular city, it will adjust its rates to promote the interest of that city. But when the road becomes merely a part of a consolidated system the identity of interest between it and the favored city ceases. Thus the Mobile and Ohio Railroad did much to build up Mobile, and always gave that port especially favorable rates. The interests of the city and the railroad were the same. But when the Mobile and Ohio became a part of the Southern Railway the latter road had no more interest in Mobile than in half a dozen other seaports upon its lines. In fact, if the Southern Railway could get a longer — and, therefore, more profitable — haul to another port, it would probably favor it rather than Mobile.[1]

The most serious objection to consolidation, however, does not relate to rates at all. Its foundation lies in the tremendous inherent and collateral power which a great consolidated railroad system possesses — a power far greater than its component roads, when independent, could ever possess. The possibility of a misuse of this power — especially in influencing legislation — is the real evil, both of the railroad and of the industrial combination. Still, if it were a question between consolidation and unrestricted competition, we should unhesitatingly take the former. But when it is between consolidation and other methods of eliminating competition, our conclusion must be different. Con-

[1] Report of Industrial Commission, Vol. XIX, p. 324.

solidation puts an end to competition within the territory covered by it. So does a pool or rate agreement, if lived up to; and these may cover a wider field and take in more circuitous routes than any consolidation not of the most comprehensive character. Economies in operation resulting from consolidation may permit lower rates; but this is balanced by the facility with which rates may be raised. And pools and rate agreements have slight collateral power for evil. On the whole, it seems clear that independent railroads with pooling or rate agreements — if made lawful and enforceable — would better subserve the public interest than the railroad systems resulting from consolidation.

Consolidations have, undoubtedly, been accelerated by the anti-pooling statute and the Sherman law. It would seem that the repeal or modification of these statutes, which might retard further consolidations, would be expedient. In any event, the latter statute should be made inapplicable to railroads so far as it prevents agreements to maintain *reasonable* rates.

But the process of consolidation has been going on. Many consolidations have taken place. A condition and not a theory confronts us. The tendency to consolidate must be recognized. That consolidations will go much further is altogether probable. Strict regard to charges should accompany the consolidation movement, to the end that rates may be made not only equal, but reasonable and just.

CHAPTER VII

MOVEMENT OF RATES

TRACING the movement of rates through a series of years requires something more than mere compilations of figures. Differences in the nature of the traffic, and in the conditions under which it is moved, make averages unreliable. Yet changes in average rates indicate in some degree the movement of actual rates. Variations in particular charges show to some extent the course of charges in general. Examining together the movement of average rates, and of some particular rates, we may approximate the general course taken by actual charges.

During the period between the close of the civil war and the end of the century there was a marked downward movement in freight rates in this country. Rates declined far more than passenger fares. In following this rate movement we should

Decline of rates.

(1) Find out the course of average rates.

(2) Compare charges through a series of years for some particular services.

(3) Collate the results of 1 and 2.

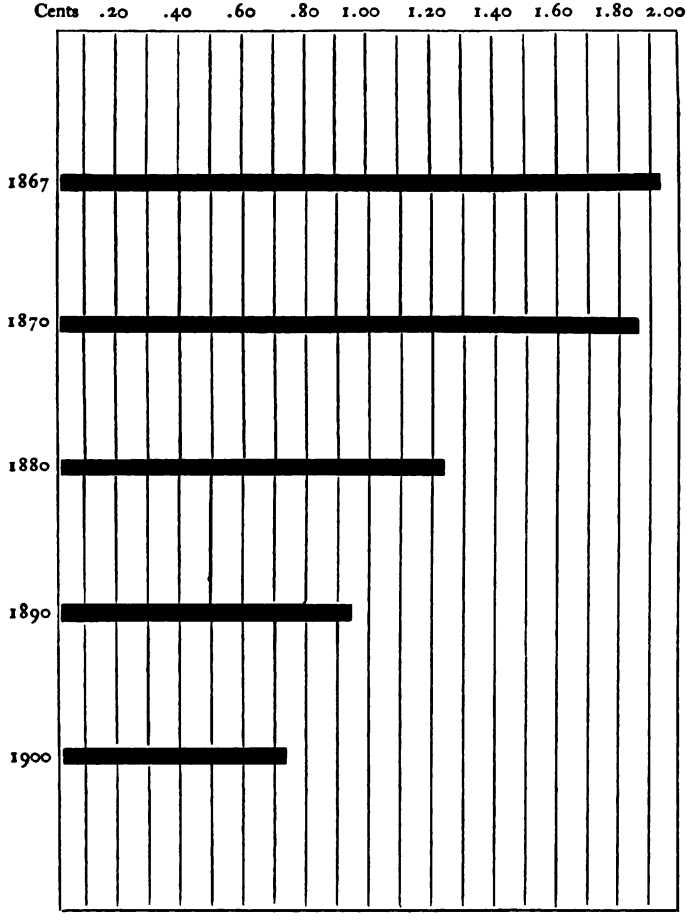
The railroad unit of traffic, as we have seen, is the ton-mile — hauling a ton a mile. The railroad measure of freight rates is the average receipt per

ton-mile. This is obtained by dividing the aggregate freight receipts by the result secured by reducing the whole freight traffic to ton-miles. Thus if the total annual freight revenue be $1,000,000 and the traffic amount to 100,000,000 ton-miles the average receipt per ton-mile is a cent. Now assuming that traffic remains of the same nature changes in ton-mile receipts indicate changes in rates. The less received per unit the less paid, and consequently the lower the charge. Making this assumption we find that, treating all the railroads in the United States as one system, freight rates on the average per ton-mile were, in 1867, 1.92 cents; in 1870, 1.88 cents; in 1880, 1.23 cents; in 1890, 0.94 cents, and in 1900, 0.72 cents. The decline is graphically shown on page 162.

These figures show that the average freight rate in this country in the period from 1867 to 1900 declined *sixty-three* per cent. But the accuracy of the conclusion drawn from these figures is weakened by the necessity of making an assumption contrary to the fact. Traffic has *not* remained of the same nature during the period. Receipts per ton-mile are manifestly determined by two factors: (1) the rate, and (2) the nature of the traffic. Changes in receipts may result from changes in the nature of the traffic as well as from changes in tariffs. Receipts per ton-mile may, of course, decline when rates decline. But they may likewise decline if rates remain unchanged or even

be slightly raised and a large amount of new low grade traffic be carried. Suppose the New Haven railroad, handling high grade traffic, received in 1903

AVERAGE RATES PER TON-MILE, 1867-1900



an average of 1.40 cents per ton-mile. Suppose in 1904 it made an arrangement with the Ontario and Western road, by which it hauled a large amount of coal — far more than it had ever hauled before. Its receipts per ton-mile in that year might decline to 1.20 cents, without any change whatever in the schedule of charges. Increases in traffic — low grade or through — taking low rates, show declines in receipts in the same manner as reductions in charges. Therefore, as low grade and through traffic increased during the period we are considering, we cannot accept unreservedly the conclusion that the decline in ton-mile receipts accurately shows the decline in even average rates. But the decline in ton-mile receipts was very great. Changes in the character of the traffic caused some part of it, but could not have caused a large part compared with that resulting from reductions in charges. The traffic as a whole was not greatly changed. While, therefore, we cannot take the figures we have noted as accurate, we are justified at least in saying from our examination thus far that there was a most marked decline in freight rates in this country from 1867 to 1900.

Let us now see what results can be obtained by noting the movement of actual charges. New York and Chicago are the most important commercial centres in this country. The rates between these cities are not only of importance in themselves, but they form bases for rates upon traffic moving between other points and in other directions. We

will first notice the movement of rates upon classified traffic for a period of nearly forty years:

RATES ON CLASSIFIED TRAFFIC FROM NEW YORK TO CHICAGO FROM 1862 to 1900.[1]

Date.	CLASSES. (Rates in cents per 100 pounds.)					
	1	2	3	4	5	Special or 6
1862–Oct.	180	150	125	75	. .	. .
1863–May	160	117	94	55	. .	. .
1864–Sept.	215	180	120	96	. .	. .
1865–Oct.	215	180	90	82	. .	. .
1866–Mar.	188	160	127	82	. .	. .
1867–Nov.	202	170	138	86	. .	. .
1868–Sept.	188	160	127	82	. .	. .
Oct.	70	60	55	50	. .	. .
Dec.	202	170	138	86	. .	. .
1869–Aug.	25	25	25	25	25	. .
Nov.	150	130	100	80	55	. .
1870–July	50	50	50	45	35	40
Dec.	180	150	120	80	60	. .
1871–June	100	90	70	55	45	. .
Sept.	30	30	30	30	24	. .
Dec.	125	110	85	65	50	. .
1872–Aug.	75	70	60	45	35	. .
Oct.	125	110	85	65	50	. .
1873–Apr.	100	90	75	60	45	. .
Aug.	27	27	18	18	17	. .
1874–Jan.	100	90	75	60	45	. .
Aug.	75	70	60	45	35	. .
1875–Jan.	100	90	75	60	45	. .
May	40	40	35	35	25	. .
1876–Jan.	75	70	60	45	35	. .
July	15	15	15	10	10	. .
1877–Mar.	75	70	60	45	35	. .
Oct.	100	90	75	45	. .	. .
1878–Feb.	75	60	50	40	. .	. .
1881–Aug.	45	32	26	19	. .	. .
Nov.	60	50	40	28	. .	. .

[1] This table and those following are abridged from Report of Interstate Commerce Commission for 1902, Appendix G, Part 2.

RATES ON CLASSIFIED TRAFFIC — (*continued*).

Date.	CLASSES. (Rates in cents per 100 pounds.)					
	1	2	3	4	5	Special or 6
1882–Jan.	45	32	26	19	..	..
Nov.	75	60	45	35	..	..
1883–June	75	60	45	35	25	..
1885–Jan.	50	40	30	25	18	..
Nov.	75	60	45	35	..	25
1887–Apr.	75	65	50	35	30	25
1888–Jan.	75	65	50	38½	33	27½
Nov.	50	40	35	30	25	20
Dec. 1888 to 1900	75	65	50	35	30	25

This table is of interest not only as showing the course of rates, but as graphically indicating the effect of rate wars and periods of depression. The fact that rates during the summer months were, as a rule, lower than in the winter months was undoubtedly due to lake competition. These figures show a marked decrease in rates during the period stated. Taking the average rates for 1867 and 1900 the percentage of decline is even more than that indicated by the average ton-mile receipts which we have considered. But it must be borne in mind that only *competitive* rates, which have declined more than local charges, are given. This table is also somewhat unreliable as a comparison sheet on account of changes in classification. Perhaps we shall obtain better results by comparing rates between the same points upon several important commodities:

RATES ON DIFFERENT COMMODITIES FROM NEW YORK TO CHICAGO, 1867–1900.

Date.	COMMODITIES (rates in cents per 100 pounds).					
	Dry Goods.	Tea.	Nails.		Beer.	
			Less than Carloads.	Carloads.	Less than Carloads.	Carloads.
1867–Nov.	202	202	86	86	127	138
1868–Aug.	149	149	82	82	127	120
Oct.	70	70	50	50	127	55
Dec.	202	202	86	86	55	138
1869–Feb.	45	45	45	45	45	45
July	188	188	82	82	127	127
Aug.	25	25	25	25	25	25
Nov.	150	150	80	80	100	100
1870–July	50	50	45	45	50	50
Dec.	180	180	80	80	120	120
1871–Sept.	30	30	30	30	30	30
Dec.	125	125	65	65	85	85
1872–Aug.	75	75	45	45	60	60
Sept.	125	125	65	65	85	85
1873–Apr.	100	100	60	60	75	75
Aug.	27	27	18	18	18	18
1874–Jan.	100	100	60	60	75	75
Aug.	75	75	45	45	60	60
1875–Jan.	100	100	60	60	75	75
Dec.	30	30	20	20	20	20
1876–Jan.	75	75	45	45	60	60
July	15	15	10	10	15	15
Dec.	50	50	30	30	40	40
1877–Oct.	100	100	45	45	45	45
1878–Feb.	75	75	40	40	40	40
1881–Aug.	45	45	19	19	19	19
Nov.	60	60	28	28	28	28
1882–Jan.	45	45	19	19	19	19
Nov.	75	75	35	35	35	35
1883–June	75	75	35	35	35	35
1885–Jan.	50	50	25	25	25	25
Nov.	75	75	35	35	35	35
1886–Aug.	75	75	35	35	35	35
1887–Apr.	75	75	35	30	50	30
1888–Jan.	75	75	38½	33	50	33
Nov.	50	50	30	25	35	25
Dec.	75	75	35	30	50	30
Apr. 1891 to Jan. 1900	75	75	30	25	50	30

This table shows a decline in rates fully equal to that indicated by the movement of ton-mile receipts. But this table, like the one preceding, includes only competitive charges.[1]

Here are tables showing the movement of local freight rates upon an Eastern and a Western railroad:

LOCAL FREIGHT RATES UPON PENNSYLVANIA RAILROAD, 1876–1900.[2]

Stations. From New York to	Year.	CLASSES (rates in cents per 100 pounds).					
		1	2	3	4	5	6
Trenton, N. J.	1876	20	17	15	12	..	..
	1886	17	17	14	12	..	..
	1887	20	16	13	9	8	7
	1890	20	16	13	9	8	7
	1895	20	16	13	9	8	7
	1900	20	16	13	9	8	7
Harrisburgh, Pa.	1876	45	30	25	20	..	..
	1886	35	30	23	17	..	..
	1887	33	28	22	17	15	12
	1890	33	28	22	17	15	12
	1895	33	28	22	17	15	12
	1900	33	28	22	17	15	12
Pittsburgh, Pa.	1876	45	30	25	29	..	..
	1886	43	35	26	20	..	..
	1887	45	39	30	21	18	15
	1890	45	39	30	21	18	15
	1895	45	39	30	21	18	15
	1900	44	39	30	21	18	15
Erie, Pa.	1876	40	35	30	25	..	..
	1886	43	35	26	20	..	..
	1887	45	39	30	21	18	15
	1890	45	39	30	21	18	15
	1895	45	39	30	21	18	15
	1900	45	39	30	21	18	15

[1] It also, like the preceding table, indicates the effect of rate wars upon charges.

[2] Joint Merchandise classification before 1887; Official Classification after 1887.

LOCAL FREIGHT RATES UPON CHICAGO, MILWAUKEE & ST. PAUL RAILROAD, 1883–1900.[1]

Distance (Miles.)	Stations. From Chicago to	Year.	CLASSES (rates in cents per 100 pounds).									
			1	2	3	4	5	A	B	C	D	E
228	Marion, Iowa.	1883	70	55	45	35	27½	32½	27½	25	20	..
		1887	60	50	37	25	20	25	20	16	13	11
		1890	55	45	32	22	16	20	16	13	12	10
		1895	58	47	35	24	19	24	19	16	14	11
		1900	58	47	35	24	19	24	19	16	14	11
309	Melbourne, Iowa.	1883	75	60	45	35	30	35	30	25	20	..
		1887	73	58	43	28	20	25	20	16	15	12
		1890	62	52	37	25	19	24	19	16	14	12
		1895	65	54	40	27	22	27	22	18	16	13
		1900	65	54	40	27	22	27	22	18	16	13
487	Council Bluffs, Iowa.	1883	90	75	50	32	28	37½	32	23	23	..
		1887	90	75	50	35	30	32½	29½	23	26	16
		1890	70	58	42	28	21	28	23	18	16	15
		1895	80	65	45	32	27	32	27	22	18½	16
		1900	80	65	45	32	27	32	27	22	18½	16

These tables of local rates indicate two facts, both of which are fully established by statistics from all over the country — (1) that local rates have declined less rapidly than competitive charges, and (2) that declines in local rates have been more marked in the Western than in the Eastern States.

We have now found that upon the basis of ton-mile receipts average rates declined considerably over sixty per cent from 1867 to 1900; that the particular competitive rates examined have declined to an equal extent; that ton-mile averages must be modified by changes in traffic, and that local rates have decreased to a limited extent. Without going

[1] Governed by "Western" Classification.

further into details, we may safely conclude that rates on an average in 1900 were less than half what they were thirty years before.

Causes of decline in rates.

An analysis of the causes which produced this marked decline in rates is:

I. Reductions in cost[1] occasioned by

(1) Increases in traffic which permitted the full utilization of facilities (or, stated in another form, the operation of the law of increasing returns).

(2) Economies in operation resulting from

(A) Combining connecting roads.

(B) Employing improved machinery to handle the traffic.

II. Competition —

(1) Indirect.

(2) Direct.

Reductions in the cost of rendering services — effected either by doing more work at the same expense, or by doing the same work at less expense — permit corresponding decreases in the charges for performing them. A reduction in cost should mean a reduction in rate, and reductions in cost — more than any other cause — have brought about the reductions in American rates.

We saw in our examination of underlying principles,[2] that a railroad is subject to the law of

[1] While we have seen in an earlier chapter that cost of service cannot be apportioned to different items of traffic and individual rates thereby determined, changes in the cost of handling the traffic as a whole are always reflected in the *average* rate.

[2] See page 19.

increasing returns — the principle that increase in production, within the limit of facilities, yields a constantly increasing percentage of profit. The more business a railroad does the cheaper it can do it. Cost varies inversely with traffic. A road may be able to obtain a constant return upon capital with an increasing business and decreasing rates. Net earnings increase more rapidly than gross earnings — rates received and prices paid for labor and materials remaining the same. Thus, from 1895 to 1900 the Rock Island road showed an increase in gross earnings of forty-five per cent and an increase in net earnings of seventy-three per cent. It is clear, therefore, that increase in traffic generally tends to reduce rates; and, as we have seen, reduced rates stimulate traffic. The marvellous growth of the United States since the civil war has given the railroads a larger traffic, enabled them to fully utilize and enlarge their facilities, and has been a most important factor in producing the decline in rates.[1] Reciprocally, the reductions in rates have tended to increase business and develop the country.

A particular way in which the development of the

[1] The growth of freight traffic is indicated by the fact that the number of ton-miles hauled increased from 95,000,000,000 in 1897 to 142,000,000,000 in 1900. Making comparison in another way and for a longer period — "the number of tons carried one mile in 1870 on a *per capita* basis was 343. This rose to 833 in 1880 and to 1217 in 1890, while for 1900, 1871 tons of freight were carried one mile for each person in the United States." Report of Industrial Commission, Vol. XIX, p. 264.

country directly permits the railroads to more fully utilize their facilities is shown in the case of empty freight cars. A railroad upon which the great bulk of the traffic is in one direction has its freight cars to haul back empty. The power expended to haul them back brings in nothing. Thirty years ago a very large part of the freight cars which came east full went back empty. The population in the west did not begin to buy back the bulk of the commodities shipped east. But while west-bound traffic is still much less than east-bound the difference has diminished. The Lake Shore Railroad which in 1870 reported seventy-two per cent of its freight moving east, in 1895 reported that it was reduced to fifty-six per cent.[1] The growth of population in the west has tended to equalize traffic over the trunk lines. The development of business along the trans-continental roads has given them freight to carry east in the otherwise empty cars. As the country grows, traffic in different directions tends to equality. And all this makes and has made for lower rates. The railroad which has to haul back its cars empty must charge both hauls against one shipment. If it can get a return load at barely cost the charge can be reduced. If the return shipment pay full charges, the outward charge may be cut in two and the road make nearly the same profit.

Economies in operation manifestly reduce cost

[1] Report of Industrial Commission, Vol. XIX, p. 296.

and enable the railroad to lower rates. In the early days of railroads, freight could not be moved any considerable distance without trans-shipment.[1] Handling several times *en route* involved delay and expense, and practically prevented any large amount of long-distance traffic. The combination of short connecting roads into through lines, which began before the war and has continued ever since, made it possible to ship goods long distances without breaking bulk, and eliminated the expense of trans-shipment, and of duplicate accounts and services. Economies in operation were effected and reductions in rates made possible. Combinations of connecting roads, unlike those of competing roads, have always been approved by the legislatures and the

[1] The condition, about 1851, of the roads now composing the New York Central, illustrates conditions in general: "We had ten roads between Albany and Buffalo. There was just about as much efficiency in operating ten roads as there would be in ten men doing a thing which one ought to do. Every board of directors had its own profit to make and its own schemes to advance. There was no obligation on the part of any one company to do anything for any other. Through lines of cars could be run only by very complicated and embarrassing arrangements. I can remember the time when conductors were changed at the end of each one of the roads of the old line between Buffalo and Albany. In some cases a ticket could not be bought through from Albany to Buffalo. The elements of usefulness and economy were very few. In regard to freight there was no obligation on the part of any one of the roads to take a single pound of it from another. Except so far as they might agree with each other it involved changing at each terminus." Statement of Secretary of New York Central Railroad before Senate Committee (1874). From *American Railway Transportation*. By Emory R. Johnson, 1904, p. 216.

courts. And they have always worked to the public good.

But while economies in operation have resulted from increases in the traffic and from working together connecting roads, their principal cause has been the improvements in the means of dealing with the traffic. These improvements may be divided into

(1) Improvements in the track.

(2) Improvements in the rolling stock.

Prior to 1870 light weight iron rails were in use. They could not bear heavy weights, were expensive, and deteriorated rapidly. With the coming into use of Bessemer steel the situation was radically changed. Rolled steel rails were brought within the means of the railroads and rapidly supplanted those made of iron. As the use increased, the price decreased. In ten years' time nearly three-tenths of the trackage in the United States had steel rails, and the average price had fallen from $120 to $67 per ton. In 1890 eight-tenths of the trackage was steel and the price of rails had fallen to $32 per ton. In 1898 the price of rails had dropped to $18 per ton, and not more than one-tenth of the trackage was of iron rails. Since that time the price of steel rails has increased about fifty per cent and iron rails have practically gone out of use. They only exist upon a few sidings and unimportant branches. And although the price of steel rails has increased from the phenomenally low price of a few years ago,

they now cost considerably less than half what iron rails cost in 1870.

With the increase in use and decrease in price of steel rails has come an increase in their size and weight. Twenty years ago rails in general use weighed about fifty pounds to the yard. Now the new rails laid generally run from eighty to one hundred and ten pounds — a hundred pound rail being the standard for heavy traffic.

The saving in first cost is one of the least of the advantages of steel rails. They last three times as long as iron rails and require fewer repairs. They permit higher speed and, more than all in its ultimate consequences, they will bear far heavier weights. This permits increases in the size of locomotives and freight cars and, consequently, of the train loads. And heavier train loads, as we shall see, mean more economical operation.

A railroad is no better than its weakest part. Only light trains could run over hundred-pound rails if light wooden bridges were upon the line. All parts of a road must be brought to the same standard of efficiency. Accordingly, improvements in bridges and road-bed followed the use of steel rails. The use of steel bridges, like the use of steel rails, has made heavier train loads practicable and thereby promoted economy of operation.

Improvements in the rolling stock followed improvements in the track. Steel rails could bear heavier weights. More powerful locomotives and

more capacious freight cars came into use, and increased in power and capacity. Locomotives have more than doubled in weight and hauling power since 1870. The capacity of a freight car then was about ten tons. Now pressed steel cars of forty or fifty tons' capacity are not uncommon. Large cars give a much greater proportion of paying to dead weight than small cars. Increase in size increases capacity more than weight. A car weighing nine tons will carry a ten ton load. A twelve ton car will carry a twenty ton load.

Cars of large capacity with powerful locomotives to haul them permit great increases in train loads and consequent savings per unit of traffic. More paying weight is handled without a proportionate increase in expense. A train of twenty cars weighing nine tons each has three hundred and sixty thousand pounds of dead weight, and can carry four hundred thousand pounds paying weight. A train of fifteen twelve ton cars gives exactly the same dead weight and can carry six hundred thousand pounds paying weight. At precisely the same expense of haulage, fifty per cent more paying weight is obtained.

We have, therefore, two factors: (1) cars of large capacity capable of carrying a much larger proportion of paying to dead weight than was formerly possible; (2) powerful locomotives able to haul as many or more of the large cars as the earlier locomotives moved of the light ones. The

necessary result of the operation of these factors is decrease in cost per unit of traffic. The same profit can be made at a lower level of charges. It is true that heavier trains require more fuel than light trains, but the increase is by no means in the proportion of the increase of the paying load. So too the interest on the increased cost of the heavy rolling stock is a factor, but not an important one. On the other hand, the number of engine and train men are not increased whether the locomotive and cars be heavy or light, or — within limits — whether the number of cars in the train be many or few. Increases in the train load, by reducing the ton-mile cost, have enabled the railroads to reduce rates, and have had a most marked effect upon the decline in charges.

We have already considered the effect of competition upon rates,[1] and it is unnecessary to do more than briefly note how far it has been a factor in producing the decline in charges which we have noticed. Indirect competition has undoubtedly played an important part in bringing about the reductions in charges. The rivalry between roads in different parts of the country to put the products of their territories into important markets upon a competitive basis has tended to keep down prices. And with the development of the country and the increase in products, this tendency has grown. The roads have been obliged to lower charges to get and

[1] See Chap. VI.

build up business. Direct competition has also been a cause of the decline in competitive rates. But, as we have seen, it has worked by fits and starts and has rather tended to increase local charges than to reduce them. Still, it must be counted as a factor in bringing about the decline in average rates.

While rates declined more than half in the thirty years preceding 1899, that year marked the lowest ebb. Rates have not only not declined since that time, but have shown an advancing tendency. Advances have been made in different ways:

Arrest of rate decline.

(1) By changes in classification, through placing articles in higher classes or by reducing the differences between carload and less than carload shipments.

(2) By abolishing commodity rates and compelling commodities to pay the heavier class rate.

(3) By directly raising the class and commodity rates.

Class rates have been raised in a very few instances. Commodity rates upon coal, iron, grain, and other products are, as a rule, slightly higher than in 1899. Some important changes have been made in the classifications, but they probably amount to less than ten per cent of all the items.

Averages based upon ton-mile receipts are not — as we have seen — wholly reliable, but they afford the customary basis for comparing charges. Here

is a table showing the movement of average rates per ton-mile from 1899 to 1903:

Year	Cents
1899	.724
1900	.729
1901	.750
1902	.757
1903	.763

The average rate, therefore, increased in the period stated thirty-nine hundredths of a mill. If we multiply this difference by the total freight hauled in 1903 reduced to ton-miles — 173, 221, 278, 993 — we have $67,556,299, representing in concrete form the increase in gross earnings that year caused by the advance in the average charge. This amounts to about three and one-half per cent of the whole gross earnings. While the figures indicate an advance, it has been slight.

But if net earnings had increased far more rapidly than gross earnings during this period this slight increase in charges would not have been the only factor. By the operation of the law of increasing returns the railroads might have obtained a largely enhanced percentage of profit at the same rates. We should not have been able to say that rates had risen, but we might have said that they should have been reduced. But unlike the years previous to 1899, the law of increasing returns has not been operating in favor of the railroads as a whole since

that time. The following table shows the average gross and net earnings per mile of the American railroads from 1899 to 1904 with the ratio of net to gross:

Year.	Gross Earnings per Mile.	Net Earnings per Mile.	Ratio of Net to Gross.
1899	$7005.	$2435.	35%
1900	7722.	2729.	36%
1901	8123.	2854.	35%
1902	8625.	3048.	34%
1903	9258.	3133.	33%
1904 (estimated)	9410.	3035.	32%

It appears, therefore, that the ratio of net to gross earnings, instead of declining, has advanced a little in the last five years.[1] This has been the result of increases in operating expenses due to advances in the prices of labor and materials. Expenditures for wages, fuel, and rails constitute the great part of the expense of operation, and all of these items have increased in cost from ten to fifty per cent. The railroads have required a large increase in earnings

[1] This does not mean, of course, that net earnings have not increased. The table shows that they increased $600 a mile from 1899 to 1903. But an increase in actual net earnings as the result of increased business is not — standing by itself — a reason for reductions in charges. When, however, the effect of increased business is both to increase net earnings and their proportion to the gross, the enhanced percentage of profit may be so great as both to justify and call for rate reductions. As we have seen, the operation of the law of increasing returns was an efficient factor in producing the decline in charges.

to take care of the additional cost. Advances in prices may be sufficient to prevent the operation of the law of increasing returns.

But increases in the cost of commodities have a more far-reaching effect upon railroad charges than through the particular materials which the railroads purchase. Prices of commodities in general affect the purchasing power of the dollar which the railroads receive in rates. The stockholders of a railroad must receive more dollars to buy the same articles when prices are high than when they are low. Rates may be increased in dollars but without any increase in real profit. Maintaining rates at the same figures in the face of advancing prices upon products in general is equivalent to reducing them. And that the prices of commodities have materially increased in the last six years is a well established and thoroughly appreciated fact.

We conclude, therefore, that while rates have undoubtedly advanced in dollars since 1899, to the slight extent shown in the movement of average charges, there has been no relative advance as compared with prices in general. Probably the most we can say is that the long continued decline has been checked. Undoubtedly it will be resumed under more normal conditions. The factors which brought it about and kept it up have not wholly lost their power.

CHAPTER VIII

COMPARISON OF RATES

THE conditions under which the freight service is carried on in the United States and in foreign countries vary so widely that only the broadest conclusions can be drawn from comparisons of charges. Such comparisons do not give accurate results. The actual difference in real charges cannot be measured. But we may ascertain that marked differences exist, and learn something from comparing methods of rate-making.

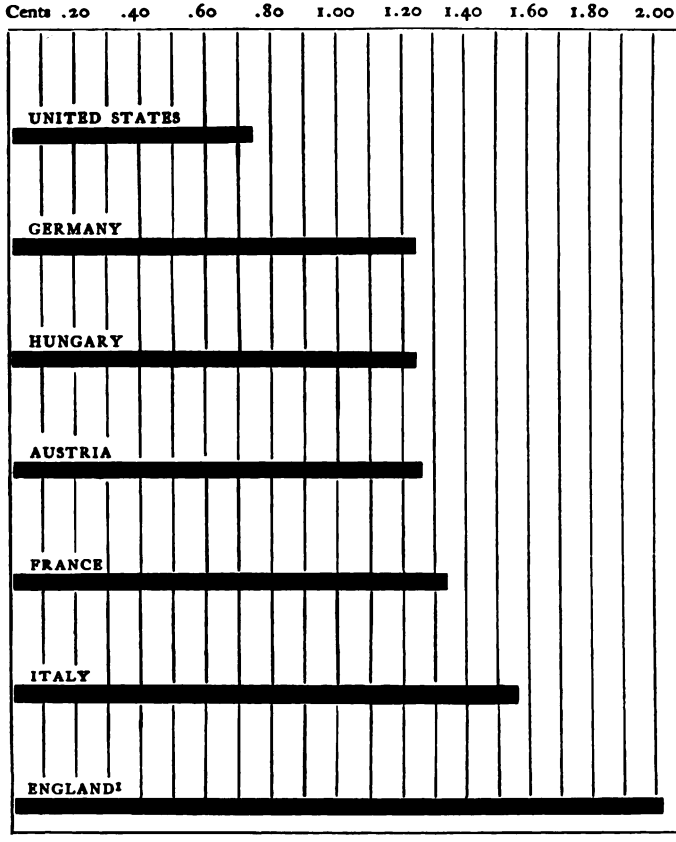
A comparison of the average freight charge in the United States with the average rate in the principal countries of Europe shows clearly that the former is very much lower than the latter.[1] A graphic comparison is shown on p. 182.

Comparing average charges.

A comparison of average charges in the different countries through a series of years shows also that average rates have declined much more rapidly in this country than abroad. All those factors which — as we have seen — make for more efficient service and lower rates, have operated in much less degree in Europe than in the United States. While rates have here declined more than fifty per cent in the

[1] On the other hand passenger fares are much higher in this country than in Europe.

COMPARISON OF AVERAGE RATES PER TON-MILE
(1902)



[1] British statistics do not show ton-mile earnings. The estimate in the table is based upon the consensus of expert opinion that the average ton-mile rate in England is a little over two cents. The North Eastern Railway which alone gives ton-mile statistics reports the following average ton-mile receipts in 1903: on minerals, 1.93 cents; on merchandise and live stock, 2.94 cents; on all commodities, 2.32 cents.

last thirty years European rates have been reduced a very much smaller percentage.[1]

But we cannot accept the comparisons of average charges as correctly showing the real differences between American and European rates. They are by no means so great as indicated. Differences in averages show real differences only when due consideration is given to dissimilarity in conditions. These are the most important differences in the rate situation upon the roads of this country and those of Europe:

(1) The average length of haul is much greater in this than in European countries. The typical haul upon the average railroad in the United States is 131 miles. This is nearly double the average haul in any European country, except Russia. Statis-

[1] The following table abridged from one in *Railway Rate Regulation in Foreign Countries* (1905), a pamphlet by H. T. Newcomb, a well known writer upon railroad questions, gives the comparative movement of rates in this country and Europe:

	United States.	France.	Germany.	Austria.	Italy.	European Russia.
1870	1.89	1.78	. . .	. . .	1.95[a]	. . .
1880	1.23	1.68	. . .	1.81	1.97	. . .
1890	.94	1.54	1.34	1.39	1.64	1.14
1892	.90	1.51	1.33	1.33	1.63	.95
1894	.86	1.47	1.32	1.31	1.63	1.00
1896	.81	1.44	1.32	1.32	1.63	.95
1898	.75	1.39	1.27	1.23	1.60	.86
1900	.73	1.32	1.22	1.24	. . .	.84
1902	.76	1.33	1.22	1.26	. . .	. . .

[a] For 1872.

tics showing the average haul of the British railroads are not prepared, but it is estimated to be about thirty miles, and less than in most other countries.

Length of haul is an important factor. Terminal expenses are independent of mileage. They are just as large whether the shipment be carried ten or a thousand miles. But it makes a vast difference with the average rate per ton-mile whether the average haul be long or short. If the average haul be a hundred miles a terminal expense of forty cents for both ends spread over the miles of haul adds four-tenths of a cent per mile to the rate. But if the average haul be forty miles the same expense adds a cent a mile.

(2) Differences in the size of the shipment also affect the average ton-mile charge. It is far more expensive to handle small shipments than carload traffic in proportion to weight. In this country probably the normal shipment is a carload. In European countries a hundred or two pounds is nearer the mark. Another thing which materially affects the size of the shipment is that the European railroads do a parcel business corresponding to the business of the express companies in this country. If the express traffic in this country should be included with the railroad freight traffic, it will readily be seen that the average American ton-mile rate would be considerably increased.

(3) Differences in the nature of the commodities carried make differences in charges. Cheap goods

cannot bear high rates, and rates upon low grade traffic are very moderate in this country. Raw products constitute a large part of the freight carried here, and necessarily diminish the average ton-mile rate. On the other hand, European railroads carry a larger proportion of manufactured goods and high grade traffic. They also — as we have just seen — carry on the express business.

(4) Differences in methods of doing business affect relative charges. Whether a rate be higher than another depends upon the service which it pays for. In most European countries the railroads collect and deliver the high class freight, and the rate paid covers the entire charge for collecting, carrying, and delivering. In this country, the railroad receives and delivers the freight at its stations, and its charges should be less.

(5) Expenses of operation also affect charges. In Europe wages are much lower than in this country. Probably the wages of railroad employees are less than half those paid in this country. On the other hand, American railroad employees render the far more efficient service and a less number are required. Fuel is cheaper in America than Europe.

It is apparent, therefore, that the real difference in charges for similar services is very much less than that indicated by the comparison of average rates. But this does not mean that there is no difference. The superior efficiency of the American railroad service must be reckoned with. Nearly all those

improved facilities for the economical transaction of business which we have noticed were first put into practical use by the American railroads. But more than all, the American railroad — having no State treasury to fall back upon — has been obliged to reduce the cost of transportation to obtain business; and, obtaining business, has been enabled to make still greater reductions.

While, therefore, we can only draw the most general conclusions from the comparison of charges, we may safely state these broad propositions:

(1) American rates upon long-distance traffic and upon heavy shipments are very much less than the charges for similar services upon the European railroads.

(2) Charges upon short-distance traffic and small shipments are not materially different in America and Europe.

(3) Charges upon parcels by European railroads are less than the charges of the express companies in this country.

We have thus far considered European rates as a whole. Let us now briefly examine the rate situation in different countries.

In England the railroad companies — like those of this country — own and operate the railroads. Maximum rates are prescribed by Parliament. Separate orders fix the maxima of each of the large railroads; the smaller roads are grouped together. There is a uniform classification

England.

for the whole country, the classes being designated A, B, C, I, II, III, IV, V. Reversing the practice in this country, the first class applies to the lowest grade traffic. Class V is high; class A is low. The classifications, like the rates, are maximum. The railroad may place commodities in lower classes if it see fit. The real classification is, therefore, that made by the united action of the railroads, called the "working" classification. This, like the statutory classification, is uniform for all the roads.

The lettered classes include articles which generally move in large quantities, and call for "station to station" charges with minimum weights. The class rates upon articles in the numbered classes, however, include collection and delivery. The English railways collect the high grade freight with teams and deliver in the same way to consignees. The following table shows the class rates for different distances upon a leading English railway:[1]

ENGLISH CLASS RATES.

Distance (Miles.)	A	B	C	1	2	3	4	5
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
20	2 1	3 0	5 6	10 3	12 3	14 0	16 7	20 1
47	5 11	5 4	8 9	14 6	17 6	20 4	23 7	29 0
95	6 1	8 6	13 10	20 2	24 10	28 6	34 3	42 1
149	7 11	10 11	17 3	24 5	31 1	36 0	43 5	52 6
211	9 11	13 10	21 4	30 8	40 0	46 8	56 5	67 6

[1] From *Railways and their Rates*. By Edwin A. Pratt. London, 1905, p. 62. The rates in the table under Class A apply only to freight carried in shipper's own cars.

"Exceptional rates" — lower than class rates and corresponding to our commodity rates — are also granted for reasons similar to those which induce the American railroads to make commodity tariffs. It is estimated that three-quarters of the British traffic is handled at exceptional rates.

The English maximum rates are so high as to have very little influence upon real charges. The railroads can fix the actual rate at any point within the prescribed limit, and the maximum rates are scarcely ever charged except upon the local and short distance traffic. But there is one peculiar thing about the English rate law. While the railroads are free to reduce rates at pleasure and, of course, originally fixed their charges at such points within the prescribed maxima as they saw fit, they cannot *raise* rates when once fixed without being liable to proceedings before the Railway Commission.[1] Any shipper may appeal to the Commission to annul the advance, and the burden is upon the railroad to justify its action. The result is that charges are seldom reduced. Rates are deprived of that adaptability to conditions so essential to the development of business. A railroad official will not test a low rate on the traffic if he cannot put back the original charge if the reduction prove unprofitable.

Subject to the statutory maxima and to the im-

[1] The British Railway Commission is composed of three members, one of whom must be a judge of a superior court.

practicability of reducing charges, actual rates are based upon what the traffic will bear. As indicated by the table, long-distance traffic pays proportionally much less than short hauls. The average charge per ton-mile is several times the average rate in this country. But the difference is largely caused by shorter hauls and smaller shipments. We have the advantage on long hauls and heavy shipments; but charges upon very short-distance traffic do not vary widely, allowing for expenses of collecting and delivering.

Pooling is permissible in England, but the necessity for it is largely obviated by a practical division of the field between the railroads. Rates are published, and deviations from the published rate have been much less common in England than in this country before the Elkins law. Secret rebates are very seldom given, and the statute against undue preferences has generally been lived up to.

France.

In France the railroads are divided into seven systems of which the government operates one—a comparatively small system in the southwestern part of the country. The six great systems are worked by private companies.[1] The roads of these companies were built with State aid, and they are operated under contracts with the State. Upon the expiration of these contracts — in about 1957 — the roads will belong absolutely to the State. In the

[1] Private companies operate 26,148 miles, and the State, 1762 miles of road.

meantime the State guarantees minimum dividends upon the railroad stocks, and makes provision for the re-payment of all moneys spent in new construction. The railroads absolutely divide the field and are complete monopolies within their territories, except as they may be affected by water competition. The French railroads are highly subsidized roads under strict governmental supervision. Maximum rates are specified in the contracts between the railroads and the State. These rates are theoretically composed of three elements: (1) the tolls for the use of the road; (2) the transportation charge for moving the goods, and (3) the terminal or "accessory" charges. Practically, the rate includes all three. Maximum rates are the actual rates for animals and carriages. As a general rule, however, rates are somewhat below the maxima, although by no means so far below as in England or America.

Rates are uniform throughout France for all fast freight transportation and upon articles shipped by slow freight and charged by the piece or head. Charges upon slow freight, however, are not uniform, although conditions of shipments are the same, and there is a uniform classification. The classification is divided into six classes, with some thirteen hundred items distributed according to value, nature, bulk, and risk.

Charges are of two kinds — rates made by kilometric tables and fixed rates. Kilometric rate tables are general formula from which the rate for any dis-

tance can be computed. Tariffs following such tables are usually upon a tapering basis; that is, the rate per kilometer decreases as the distance increases, as shown by this illustration:

GENERAL TARIFF.[1]

	Rate per Kilometer.	Food Products.	Other Merchandize.
	Kilometers.	*Centimes.*	*Centimes.*
Per kilometer	0–100	24	32
Per additional kilometer	100–300	22.5	30
Do	300–500	21	28
Do	500–600	19.5	26
and so on — the reduction being per even 100 kilometers.			

A fixed rate is lower than that which would result from the general rate table and is granted when required by peculiar commercial conditions. Special rate tables are also sometimes made in order to give reduced charges. When a reduced rate is given, stations beyond those to which it applies may take advantage of it by *welding* the reduced rate to the local charge for the additional distance.

While the contract between the railroad and the State fixes the maximum rate, all charges within the prescribed limit must be approved by the minister of public works. The minister has discretionary power to give or withhold his approval. Similarly,

[1] From *Abrigé de la Législation des Chemins de Fer et Tramways.* By C. Colson, 1903. A large part of the data regarding French rates has been obtained from this book.

all changes in tariffs must be submitted to the minister and go through a long and complicated course of procedure before they can go into effect. The initiative, however, must be taken by the railroads. Changes in tariffs can be made by the public authorities of their own motion only under extraordinary circumstances.

As charges must always be approved, the railroad is bound to abide by them. It can, under no circumstances, deviate from the approved rate. Discriminations are practically unknown in France.

The railroads are bound, under the contracts with the State, to deliver goods at the residence of the consignee, except in small places, or places a considerable distance (more than 5 kilometers) from the station. It is optional with the roads to collect freight at the point of departure, but it is customary to do so in order to fully utilize the wagons.

Average charges, as we have seen, are higher in France than in this country. And while conditions are so different as to make comparisons of averages of little use, charges for the same service — if involving a heavy and long-distance shipment — are undoubtedly much less upon the American than upon the French roads. Charges in France are also higher than in the other leading continental countries of Europe, and have declined less rapidly. This situation is largely the result of two factors: (1) the non-development of long-distance traffic, and (2) the difficulty of reducing charges. The situation

in the last respect is even worse than in England. It is practically impossible to lower rates to develop traffic. Rates become stereotyped and cannot be adjusted to meet changing business conditions. Inelasticity and high charges, resulting from close governmental supervision, offset in France the benefits accruing from the absence of discriminations and direct competition.

In Germany the State-operated railroad has reached its highest type. Out of thirty-two thousand miles of road less than ten per cent are operated by private companies.[1] These private roads, moreover, are comparatively unimportant, are not competitors of the State roads, are under close governmental supervision and, probably, will be taken into the State system. The remainder of the German railroads are owned and operated by the State. Germany.

State-owned railroads have existed to a limited extent in Germany for many years, but the policy of nationalizing the roads of the country began only about 1878, after which it developed rapidly. Roads were purchased from their owners — usually by the exchange of government bonds for the railroad

[1] The total railroad mileage in Germany is 32,288 miles, of which 29,473 are operated by the State and 2815 by private companies. Of the State-operated roads about seventy-five per cent are owned by the Prussian Government and the remainder by the other German States. The Government of the Empire operates no roads, although it owns the system in Alsace-Lorraine and leases it to Prussia. We shall, therefore, treat Prussian as German practices — the Prussian railroad being typical of the German roads.

securities — until the present national system was built up. The German railroads are under the control of a graded administrative system — central, international and local. The executive head of the railroad administration is the minister of public works. Different railroad directories, acting under the minister, have supervision of the railroads in different sections of the country. Below these general directories are special administrative officers who have direct charge of railroad operations.[1]

Advisory councils — composed of persons selected from the general public — also have a part in German railroad administration. Circuit councils act in an advisory capacity to the different directories. A national council acts in a similar capacity to the minister of public works. The function of these councils is to investigate railroad operations and to make recommendations of any changes they deem expedient. They give especial attention to rate schedules. These councils are created by law, and while they can only advise, and have no legal power over the railroads, they have been efficient factors in preventing friction between the roads and the people. And that is their real purpose — to bring the railroad officials and the public in touch.

Originally the German tariffs were based upon the

[1] Much of the material for this examination of German railroads has been obtained from the Report of the Industrial Commission, Vol. IX, pp. 962–983 — an article upon Prussian Railways prepared by Prof. B. H. Meyer.

equal mileage principle — with slight modifications. There was an equal rate per ton-mile in addition to a fixed terminal charge. It was appreciated that if the terminal charge were made too high very short-distance traffic would seek some other means of conveyance. So the terminal charge was made much lower than the actual expense. This satisfied the short-distance traffic. It was then found that the low grade traffic could not bear the long-distance mileage. The long-distance rate was then reduced and the principle of *equal* mileage rates thereby abandoned.

The present German rate is made up of two factors: (1) a terminal charge which slightly increases with distance up to 100 kilometers (62 miles), and (2) a haulage charge per ton per kilometer, except in the case of low grade traffic where the rate is lower for distances above 100 kilometers.

The following division of traffic — operating as a slight classification — is made:

(1) Fast parcel freight.

(2) Fast carload freight.

(3) Parcel freight.

(4) General carload class A1, in shipments of at least 5,000 kilograms.

(5) General carload class B, in shipments of at least 10,000 kilograms.

(6) Special tariff A1, in shipments of at least 5,000 kilograms.

(7) Special tariffs I, II, and III, in shipments of at least 10,000 kilograms.

The valuable goods and those requiring quick service take the first places, while the least valuable commodities take the special tariffs in the lowest class upon the list. These special tariffs, which correspond to our commodity tariffs, are likewise based largely upon value — manufactured goods going into tariff I, while raw products are placed in tariff III. The rate for transportation falls with the class — fast parcel freight taking the highest, and special tariff III the lowest, class rate.

The lowest rates, however, are contained in the "preferential tariffs," which are officially described "as applicable to agricultural and industrial products and intended to assist and facilitate imports and exports, and increase the traffic of the country." These preferential rates are given as bounties to enable certain districts to export their products; as aids to different industries by carrying raw materials cheaply, and for various other reasons — political as well as economic. To such an extent has the granting of preferential charges been carried that less than half the traffic is now moved at regular rates.

The German railroad service is efficient, and the railroads have been operated with profit to the government. Passenger fares are much lower in Germany than in the United States. Average and actual freight rates, on the other hand, are lower here than there. The difference in averages is partly due to shorter hauls. The difference in real charges results, in large measure, from the econ-

omies in operation incident to the superior development of the freight service upon the American railroad.

In Austria over sixty per cent of the railroad mileage is operated by the State. The remainder is operated by private companies under strict governmental regulation. In Hungary the government operates over eighty per cent of the railroads. The tendency in both countries is toward complete government ownership. Austria-Hungary.

The famed "zone system" of rate making exists upon both the State and private roads in Austria and Hungary — having been introduced into the latter country in 1889. A certain distance of carriage is established by law as a zone. A uniform rate is charged to all stations within the zone. Traffic moving to the last station within the prescribed limits pays the same as shipments to the nearest point. After a certain number of zones distance is disregarded. The last zone includes all the country beyond a prescribed point. Thus in Hungary the zone for local passenger traffic was originally ten kilometers (6.2 miles), and for through traffic a somewhat greater distance, with fourteen zones. The zone for freight traffic was fixed at two hundred kilometers (124 miles), and there were three zones: Zone I for distances below two hundred kilometers; Zone II for distances between two hundred and four hundred kilometers, and Zone III for all distances beyond four hundred kilometers.

The Austrian system is a modification of that of Hungary.

The purpose of the zone system was to modify the equal mileage principle in favor of long-distance traffic. Cheap and bulky goods like raw products moving considerable distances form a large part of the traffic in Austria and Hungary; and these goods could not bear equal mileage rates.

The zone system involves no new principle. It merely enlarges the unit of distance. American rates would not be made in any very different way if the unit were a hundred miles instead of one. The system is very simple and convenient, although it makes some shippers pay for more than they get in comparison with others. Its chief merit, however, lies in the fact that it serves to develop long-distance traffic in bulky goods and thereby helps to build up the industries of the country. But this is not because there are zones. The real reason is that the system is an indirect method of "charging what the traffic will bear."

Average rates in Austria and Hungary are higher — as we have seen — than in America and Russia; about the same as in Germany, and lower than in other European countries. But unlike the State railroads in Germany, the roads operated by the government in Austria and Hungary have generally returned deficits instead of profits.

An examination of rates and rate making in other European countries would disclose no essentially

different principles or practices from those which we have considered. As, therefore, our purpose is rather to bring out American conditions by comparison than to study the rate situation in foreign countries, it is unnecessary to carry our examination further.

CHAPTER IX

STATE REGULATION OF RATES

THE regulation of transportation charges by the State governments can only be effectual as it supplements federal action. In the constitutional division of the field, the important traffic is beyond the reach of the State. Standing by themselves, State laws are wholly inadequate. Still the regulation of charges by the States long preceded the declaration by the Interstate Commerce Act that rates should be reasonable and just. The earliest charters fixed maximum charges. They were also prescribed in general laws, and commissions were given power to establish them. Rates made by law are no new thing. The lessons we shall learn, however, from examining the authority of the State and its limitations, and past and present State legislation, will be largely negative. What cannot be done will be indicated fully as much as what can be done.

Power of State over rates.

We have seen that a railroad company, in consideration of the grant by the State of its charter and the right of eminent domain, assumes public obligations, and becomes, in respect of their performance, subject to the control of the State. We have also seen that the public duties of a railroad exist independently of its charter

obligations and grow out of the nature of the business in which it is engaged — that of a common carrier. And we have further seen that the supervising power of the State, whether based upon the nature of the railroad corporation or its business, extends, within constitutional limits, to the regulation of rates.[1]

The State having power to regulate rates upon two grounds — the *quasi*-public character of the corporation and the public nature of its employment — any action taken is necessarily based upon both grounds; and in considering the question of *authority* it is unnecessary to differentiate between them. But in determining the *expediency* of action by the State, and the extent to which it should go, the nature of the obligations of the railroad may properly be examined.

Rate regulation merely and solely because a railroad is a *quasi*-public corporation would be of doubtful propriety. It is possible to lay too much stress upon the obligation which a railroad company owes to the State in consideration of the grant of its charter and the accompanying right to condemn lands for its road. The franchise to build and operate a railroad is seldom a special privilege. Most of the States have general laws granting such franchises to any persons who choose to put up the capital and comply with the conditions. The right of eminent domain, while an extraordinary, is not

[1] See page 3.

an unusual, power. It is granted to other corporations than railroads, including mills. It is coupled with the obligation to make just compensation for property taken; and just compensation in practice is seldom less than very liberal compensation.

On the other hand, it is difficult to assert too strongly the obligation which a railroad assumes in entering a public employment. The business of a common carrier upon one of the country's highways of commerce deeply affects the public interest. The State may well see that it is carried on under conditions just both to the shipper and to the railroad. The principle established by the Supreme Court of the United States in the Granger cases[1] that when property has been clothed with a public interest the legislature may limit the charges for its use is — more than the *quasi*-public character of the railroad corporation — the real and substantial source of the authority of the State to regulate railroad charges.

Legislative functions respecting rates.

It is a cardinal principle of our system of government, both in the State and the nation, that the making of laws and regulations for future conduct belongs solely to the legislative department. To declare what the law shall be is the function of the legislature alone.

[1] Munn *v.* Illinois, 94 U. S. Rep. 113. This case with several others decided by the Supreme Court at the same time are called the "Granger cases." The Granger movement is considered later in this chapter.

We have seen that railroads as common carriers are subject to governmental regulation which may go so far as to fix the charges for transportation. But this regulation is purely a legislative function. The power to establish a tariff of charges or make a single railroad rate belongs to the legislature alone, whether it be the legislature of the State or the Congress of the United States.[1]

While the legislature declares what the law shall be, the courts declare what the law is. The legislature deals with the future; the judiciary, with the past and present.

Judicial functions respecting rates.

Making rates for the future is not within the province of the courts. And it is equally true that determining in a controversy the reasonableness of existing rates is not within the province of the legislature. As we have already seen, that question is a judicial one.[2] "It is one thing to inquire whether the rates which have been collected are reasonable — that is a judicial act; but an entirely different thing to prescribe rates which shall be charged in the future — that is a legislative act."[3]

The legislature cannot confer upon the courts power to make future rates; nor can it confer what

[1] The principles stated in the text are clearly established by a long line of decisions by the Supreme Court of the United States, and by State and lower federal courts. Perhaps they are more succinctly stated in the Maximum Rate Case, 167 U. S. Rep. 499, than elsewhere.

[2] See page 33.

[3] Maximum Rate Case, 167 U. S. Rep. 499.

is equivalent — power to revise rates made by a commission and to modify its findings. If the courts could exercise the same discretion in reviewing a rate as the commission exercised in making it, the functions of both would be the same — and both would be legislative. A statute imposing any such non-judicial duties upon the courts would be unconstitutional. The functions of the judicial department are separate and distinct from the other two. They cannot be commingled. Neither directly nor indirectly can the courts be required to perform duties properly belonging to another department of the government.[1]

A case illustrating this point is worth examining. A statute of Minnesota gave the railroad commission of that State power to make rates, but provided for an appeal from the action of the commission to the district court. The act further provided that upon the appeal the court should "examine the whole matter in controversy, including matters of fact as well as questions of law, and affirm, modify, or reverse such order in whole or in part as justice may require; and in case of any order being modified as aforesaid, such modified

[1] Hayburn's Case, 2 Dallas Rep. 409; United States *v.* Ferriera, 13 Howard Rep. 40; Gordon *v.* United States, 117 U. S. Rep. 697; Interstate Commerce Commission *v.* Brimson, 154 U. S. Rep. 447; Norwalk St. Ry. Co.'s Appeal, 69 Conn. Rep. 597.

A law is unconstitutional which vests in one body legislative and judicial powers. Western Union Tel. Co. *v.* Myatt, 98 Fed. Rep. 335; State *v.* Johnson, 61 Kans. Rep. 803.

order shall, for all the purposes contemplated by this act, stand in place of the original order so modified, and have the same force and effect throughout the State as the orders of said commission." But the Supreme Court of Minnesota said of these provisions: "If by this the legislature intended to provide that the court should put itself in the place of the commission, try the matter *de novo*, and determine what are reasonable rates, without regard to the findings of the commission, such intent cannot be carried out, as a statute which so provided would be unconstitutional. The fixing of rates is a legislative or administrative act, not a judicial one. And the performance of such duties cannot, under our constitution, be imposed on the judiciary." [1]

Conversely, judicial power cannot be assumed by the legislature nor be conferred upon a subordinate legislative or administrative body. A State railroad commission authorized to fix rates for the future cannot be a court, because legislative and judicial functions cannot be united in one body. A commission of such a nature cannot determine the reasonableness of a rate in a controversy between a shipper and a carrier and afford a remedy, because a judicial question is presented, and a commission is not a court. And if it were given a judicial character it could not then exercise any non-judicial functions.

[1] Steenerson *v.* Great Northern R. Co., 69 Minn. Rep. 353.

The legislature cannot delegate its power to make laws. Statutes can be enacted only by the agency created by the constitution for the purpose. But when the legislature has adopted general rules, it may delegate the power to apply them to specific facts, and to exercise discretion in respect thereto. A commission may be created to perform legislative functions of a *quasi*-administrative character. When the legislature has declared that railroad rates shall be reasonable and just, it may authorize a commission to fix the specific charges.[1] Any other conclusion would practically prevent the legislature from exercising its power to make rates. The country is so large, the railroads so numerous, and conditions so variable and changeable that direct rate making by the legislature, with annual or biennial sessions, would be wholly out of the question. Moreover, legislatures

Delegation of rate-making power.

[1] Reagan *v.* Farmers' Loan & Trust Co., 154 U. S. Rep. 362. See also Railroad Commission Cases, 116 U. S. Rep. 307; Tilley *v.* Railway Co., 5 Fed. Rep. 641; Chicago, etc. R. Co. *v.* Dey, 35 Fed. Rep. 866; Georgia R. Co. *v.* Smith, 70 Ga. Rep. 694; Express Co. *v.* Railroad Co., 111 N. C. Rep. 472; McWhirter *v.* Pensacola R. Co. 24 Fla. Rep. 471.

If it were an open question there would be ground for claiming that a mere provision that rates should be just and reasonable leaves so much to the discretion of the commission as to be no rule or standard at all. The principle, however, stated in the text is sustained by the cases referred to and others, and cannot now be regarded as doubtful. Undoubtedly, the fact that the legislature practically could not exercise the rate-making power except by means of a commission, and that a very large measure of discretion necessarily must be left to it, largely influenced the decisions.

are not adapted to pass upon the matters of detail necessary in making rates.

Laws have, therefore, been adopted in several States conferring upon commissions power to prescribe rates for railroad services. These laws have been sustained by the Supreme Court of the United States, which said in a leading case: "There can be no doubt of the general power of a State to regulate the fares and freights which may be charged and received by railroads or other carriers, and that this regulation can be carried on by means of a commission. Such commission is merely an administrative board created by the State for carrying into effect the will of the State expressed by its legislature." [1]

When a commission, in the exercise of power delegated by the legislature, makes a rate the result is the same as if the legislature directly acted. The act of the commission supplements and makes effective the act of the legislature. The rate resulting from the joint action of the legislature and its agent *is* the law. Making a rate in legal effect is making a law that such shall be the rate. The courts have only one inquiry with respect to such a rate — is it constitutional?

The limitations imposed by the federal Constitution upon the power of the State legislatures — directly or through commissions — to make rates are those of

(1) The Commerce Clause.

(2) The Fourteenth Amendment.

[1] Reagan *v.* Farmers' Loan & Trust Co., 154 U. S. Rep. 362.

As we shall see more at length in considering the federal regulation of rates, railroad traffic between different States is subject only to the regulating power of Congress. The existence of the power in Congress by virtue of the Commerce Clause of the Constitution, rather than its exercise, entirely excludes action by the State. The State has no power over *interstate* commerce, direct or indirect, and action or inaction by Congress is immaterial. The fact that traffic originates or finds its destination within a State gives the State no right to interfere with it, if it cross the border of the State going or coming.

Limitations of Commerce Clause.

The State, however, has the exclusive power to regulate *intrastate* commerce. Railroad traffic wholly within a State is wholly subject to State control. Charges for transportation services commenced and completed within the State are subject to regulation by the State.

The great bulk of the railroad traffic of the United States crosses State lines. State statutes regulating rates, either directly or through a commission, must, therefore, always prove insufficient to deal effectually with unreasonable and unjust charges. If it be expedient that rates should under any conditions be fixed by law, Congress must take the step. State laws can at best only supplement federal action.[1]

[1] The decision in the Wabash case (Wabash etc. R. Co. *v.* Illinois, 118 U. S. Rep. 557) in which it was held that a State has no

The Fourteenth Amendment to the Constitution of the United States is another limitation of State authority. It broadly guarantees the right of property. It provides that no State shall "deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws."[1] Depriving the owner of property of compensation for its use in effect deprives him of the property itself, for the value of property generally lies in its use. Requiring him to employ his property for the public benefit for a less return than others receive for similar services denies him the equal protection of the laws.

Limitations of Fourteenth Amendment.

Making rates by law is purely a legislative function. The power of the State legislatures in the regulation of intrastate traffic covers a narrow field, but is comprehensive within that field, except as it is limited by the Fourteenth Amendment. "Power to regulate is not power to destroy, and limitation is not the equivalent of confiscation. Under pretense of regulating fares and freights the State cannot re-

power whatever over interstate shipments — not even over that part of the transmission which is within the State — effectually demonstrated the inability of the States to deal with the railroads. This case was decided in 1886, and had much influence upon the adoption of the Interstate Commerce Act in 1887.

[1] A corporation is a person within the meaning of the Amendment, and is entitled to the same protection as natural persons. Santa Clara County *v.* Southern Pacific R. Co., 118 U. S. Rep. 394.

quire a railroad corporation to carry persons or property without reward; neither can it do that which in law amounts to a taking of private property for public use without just compensation or without due process of law."[1]

When the legislature has acted, either by itself or through a commission, and has prescribed a tariff of charges the question then arises whether its action is constitutional — whether it violates the Fourteenth Amendment. This is purely a judicial question. The courts alone determine the constitutionality of laws, and, as we have seen, a rate made by legislative authority — direct or indirect — is a law.

The inquiry to be determined by the courts is whether the rates prescribed by the legislature or commission are so unreasonable that their enforcement would deprive the railroad of a fair return for the use of its property in violation of the Constitution. Stated in simpler form — *the question is whether the law-made rates are confiscatory.* If they are confiscatory and, therefore, unconstitutional, it is the duty of the courts to restrain their enforcement. Acting upon this principle the Supreme Court of the United States, having held that schedules of rates established by the railroad commission of Texas,[2] the railroad commission of Nebraska,[3] and

[1] Railroad Commission Cases, 116 U. S. Rep. 331, *per* Chief Justice Waite.

[2] Reagan *v.* Farmers' Loan & Trust Co., 154 U. S. Rep. 391.

[3] Smyth *v.* Ames, 169 U. S. Rep. 466.

the legislature of Kentucky,[1] were confiscatory of rights of property, enjoined their enforcement. And the Supreme Court has reaffirmed the principle in other cases where the tariffs have been sustained.[2]

The standard of reasonableness applied by the courts in determining the validity of a schedule of rates prescribed by legislative authority is essentially different from that considered in a controversy between a shipper and the railroad. As we have seen, the courts, under the common law, have power to pass upon the reasonableness of the charges of common carriers. In determining the question of reasonableness, the courts must consider all the factors entering into the rate. They may substitute their judgment of a just and proper charge for that of the carrier. But the courts cannot substitute their judgment of a reasonable rate in place of that of the legislature or the legislature's subordinate body. The act of the legislature in fixing a rate is a law that such shall be the rate. The courts can no more question its expediency or propriety than in the case of any other law. It is immaterial whether they think, under all the circumstances, that it should have been greater or less. The courts have nothing to do with legislative-made rates except to determine whether they violate constitutional pro-

[1] Covington etc. Turnpike Co. *v.* Sandford, 164 U. S. Rep. 578.

[2] Minneapolis etc. R. Co. *v.* Minnesota, 186 U. S. Rep. 257; St. Louis etc. R. Co. *v.* Gill, 156 U. S. Rep. 649; Dow *v.* Beidleman, 125 U. S. Rep. 680.

visions. The inquiry is whether the rates prescribed by law are so unreasonably low as to infringe the property rights of the railroad. The duty of the courts is to determine whether the rates are confiscatory, not whether they are fair between shipper and carrier. As said by the Supreme Court of the United States: "The courts are not authorized to revise or change the body of rates imposed by a legislature or a commission; they do not determine whether one rate is preferable to another; or what, under all the circumstances, *would be fair and reasonable as between the carriers and the shippers;* they do not engage in any mere administrative work." [1]

[1] Reagan *v.* Farmers' Loan & Trust Co., 154 U. S. Rep. 397.

Dicta may be found in this and in other decisions to the effect that the courts may prevent the enforcement of a schedule of rates made by a railroad commission upon the ground that it is *unreasonable.* The word "unreasonable," in this case and most others, is, however, used in the sense of "confiscatory." If a broader meaning were intended the *dicta* would seem not well founded. As we have seen, when the legislature confers upon a commission discretionary power to make a rate, the result of the commission's action is the same as if the legislature itself acted. The rate when made is made by legislative authority. It becomes in legal effect a law. The courts can deal with it only with respect to its constitutionality. If not confiscatory it is not invalid. The question is not whether the legislative-made rate is unreasonable, but whether it is *so* unreasonable as to amount to a taking of property. As said by the Supreme Court of the United States in its latest decision upon the subject (Minneapolis etc. R. Co. *v.* Minnesota, 186 U. S. Rep. 268, decided in 1902) in holding rates made by the Minnesota commission valid: "The action of the commission in fixing the rate complained of as to this particular class of freight has not been shown to be *so unjust or unreasonable as to amount to a taking of property without due process of law.*"

There is another distinction between the inquiry whether law-made rates are valid and whether a carrier's charges are reasonable. In the latter case, single rates are generally the subject of examination. In the former, an entire schedule is, almost of necessity, under consideration. It is impossible to say that the reduction of a single rate — however great the reduction may be — is confiscatory. The railroad may still earn a fair profit upon its whole business. Such a reduction could only be considered confiscatory in case it were assumed that all the rates would be correspondingly reduced. But no such assumption could be made. It does not follow because a commission reduces one rate that it will reduce others.[1] It is the schedule, rather

And it makes no difference that the statute empowering the commission to act provides that rates shall be reasonable and just. This is a general rule for the commission, but the discretion to be exercised in determining what rates *are* reasonable and just is the discretion of the commission upon which the discretionary power has been conferred, and not of the courts upon which the power has not been conferred. If a definite standard were prescribed according to which rates should be made by a commission — *e. g.* that they should be two cents per ton-mile, the courts might be called upon to determine whether the commission had departed from the rule and thereby exceeded its delegated powers. But the courts could not substitute their opinion of reasonableness — where there is no definite standard — for that of the commission unless the limit of confiscation were reached. And this for two reasons based upon the same principles:

(1) The courts cannot participate directly or indirectly in the exercise of the legislative rate-making function.

(2) The courts cannot interfere with the exercise of legislative power except upon constitutional grounds.

[1] Minneapolis etc. R. Co. *v.* Minnesota, 186 U. S. Rep. 266.

than the rate, which presents questions of constitutionality.

And now, having considered the powers of the States and their limitations, let us see what the States have actually done in the way of regulating rates.

Early rate legislation.

In our examination of underlying principles, we saw that the State, in granting the early railroad charters — following the old canal acts — often prescribed tolls to be collected for the use of the road, as well as charges for the transportation service.[1] While this distinction was not long observed, and the rate was treated as covering both the toll and the charge, nearly all charters contained some provisions concerning rates. Generally, maximum rates were prescribed, leaving to the railroad the right to fix the exact rates within the stated limits.

A *Georgia* charter, granted in 1837, provides that "the charge for transportation or conveyance shall not exceed twenty-five cents per one hundred pounds on heavy articles, and ten cents per cubic foot on articles of measurement for every hundred miles."[2]

A *Connecticut* charter (1829) contains this provision: "It shall be lawful for them (the directors) to charge for every hundred pounds transported

[1] See page 16.

[2] This illustration and those following are from the Report of the Industrial Commission, Vol. IX, p. 904.

sixty miles or upwards $2\frac{1}{2}$ mills per hundred pounds weight for each mile; for every hundred pounds weight transported over twenty miles and under sixty miles, 3 mills for each mile; for every hundred pounds below twenty miles, $3\frac{1}{2}$ mills per mile."

A *Maryland* charter, granted in 1831, fixed the maximum rate for freight at three cents per ton-mile for both toll and transportation.

A *North Carolina* charter (1837) provides that there shall be received "for transportation of goods . . . not exceeding an average of ten cents per ton-mile."

A much later *Washington* charter (1862) went still further and prescribed a maximum of *forty* cents per ton-mile.

These charter maxima — as is indicated by these illustrations — were usually so far above what the railroad could ever expect to charge as to have no effect upon the real rate.

But while maximum rates were sometimes prescribed, most charters empowered the railroads to make such rates as they saw fit. The policy of a majority of the States, as shown both in their charters and general laws, has always been to let rates alone. The most common provision empowered the railroad to charge "such rates as may be agreed upon and established from time to time by the directors."

General laws were passed at an early date in

several States prescribing maximum rates, and these provisions have, as a rule, continued upon the statute books. But, like the charter maxima, they were generally fixed so high as to constitute no real limitation of the actual charge. Thus a Nevada statute prescribes a rate limit of twenty cents per ton-mile.

Several States did not pass maximum rate laws, or restrict rates in charters, but attempted to limit them by providing that when the net income should exceed a certain amount — usually ten per cent upon the capital — the legislature should then step in and revise the charges.[1] But the legislatures have not been troubled with business under these statutes. If improvements will not keep down net earnings, it is very easy to increase the capital stock.

Many of the statutes relating to railroad charges, and especially those providing for commissions with mandatory power over rates, are a result of the "Granger" movement which took place in the States of the Middle West between 1870 and 1877.

Granger movement.

With the exception of the charter provisions of the type which we have noticed, and a few general laws, there was no general movement to obtain reduced charges upon railroads until about 1870. At that time war prices had fallen, the production of

[1] Sometimes it was provided that the income in excess of the ten per cent should be devoted to public uses.

grain had largely increased, and the charge for transportation became a more important factor than ever before. Discriminations existed to a large extent, and public feeling began to rise against the railroads. What caused the most discontent was the discrimination in favor of the competing centre over the intermediate station. We have seen that such discriminations may be justified by conditions. But the farmer at the local station did not look at the matter from the standpoint of economics. He saw that he paid more to send his grain to market than his competitor did who lived, perhaps, further away. He objected; and the agitation for the control of the railroads by the State began. The Granges had been organized to promote the improvement of the farmer's interests, but without any special reference to the railroad situation. They became, however, the instruments through which the campaign against the railroads was carried on. Granger legislatures were elected in Illinois, Wisconsin, Iowa, Minnesota, and other States. Stringent statutes limiting rates and appointing commissions with mandatory powers were passed. Several of these laws were contested in the courts upon constitutional grounds, but they were sustained by the Supreme Court of the United States in the "Granger cases," [1] and the power of the State to regulate railroad charges upheld. But before the decisions of the Supreme

[1] Munn *v.* Illinois, 94 U. S. Rep. 113, and five other cases decided by the Supreme Court at the same time.

Court sustaining the principle of the Granger laws had been rendered, economic conditions had forced the repeal of some and the modification of others. They went too far. The Potter law of Wisconsin was the most stringent. Its principle was to reduce all charges to the level of the rates charged by the railroad between competitive points. The roads could not do business under such a law. A chaotic condition existed which was reflected in general business, and the law was repealed after two years' trial. In Iowa a maximum rate law was superseded by a statute creating a commission with power to make rates. The Illinois statute providing for a commission with power to prescribe rates, with some modifications, still exists. The Granger law of Minnesota was soon repealed.

But while the original Granger legislation was short-lived, its fundamental idea that railroad charges should be controlled by the State, especially through a commission, will be found to underlie many of the existing statutes relating to railroads — in States both within and without the field of the Granger movement — which we shall now consider.

Existing State legislation.

As we have seen, the early charter provisions limiting the rates to be charged by railroads were followed by ineffectual general laws in several States to the same effect. Maximum rate laws, while amounting to little, are still in force in various forms in

Arizona,	Ohio,
California,	Pennsylvania,
Maryland,	Tennessee,
Michigan,	Texas,
Missouri,	Virginia,
Nevada,	Washington,
New Hampshire,	West Virginia,
New Jersey,	Wisconsin.
New Mexico,	

The demand for more effective rate regulation, as indicated by the Granger movement, resulted in the creation of State railroad commissions with power to make and revise rates.

Railroad commissions had existed in several States long before this time, but their functions were wholly of a supervisory nature. They had no power over rates. They could merely report conditions to the legislature and suggest remedies. These advisory commissions still exist in most of the Eastern, and in several other, States. Some of them have done excellent work. But the commissions resulting from the Granger movement have mandatory powers. These commissions are of two sorts:

(1) Those which *must* make and revise rates

(2) Those which *may* make and revise rates.

The majority of the mandatory commissions are of the first kind. The statute creating the commission not only confers a power but imposes a duty. It usually provides that the commission "shall

make for each railroad in the State a schedule of reasonable rates "— actual or maximum — and shall revise the same from time to time.[1] Railroad commissions of this character exist in

Alabama,	Mississippi,
Arkansas,	North Carolina,[3]
California,	North Dakota,[2]
Florida,	South Carolina,
Georgia,	South Dakota,[2]
Illinois,[2]	Tennessee,
Louisiana,	Texas.

The second form of mandatory commission has power to make and revise rates, but it is not obliged to do so. Its purpose is rather to correct the railroad schedules when required, than to make schedules for the railroads. The statute creating the commission generally provides that it may upon complaint, or upon its own motion, investigate the rates charged by any railroad; may require the railroad to make changes in such rates; and may, from time to time, modify its orders. Commissions of this character exist in

Iowa[2]	Minnesota,
Kansas,[4]	Missouri,[4]
Kentucky,	New Hampshire.[4]
Maine,[4]	

[1] Report of Interstate Commerce Commission for 1902, Appendix G, Part IV, p. 19.

[2] Commission can make maximum rates only.

[3] Corporation commission.

[4] Commission acts upon complaint or petition.

Railroad commissions are also authorized to make joint rates upon freight carried between any points within the State in

Arkansas,
Florida,
Georgia,
Iowa,
Minnesota,
Missouri,
South Carolina,
South Dakota,
Texas.

CHAPTER X

FEDERAL REGULATION OF RATES[1]

THE present railroad problem is the problem of federal rate regulation. The questions involved — both of power and expediency — are far-reaching and difficult of solution. Questions of power depend upon constitutional limitations. Questions of expediency can be solved, if at all, only by eliminating bias. Proposals for radical measures are entitled to no more consideration than the complacent view that whatever *is*, is right. Considering the interests of all parties, the real inquiry is whether the people as a whole will be better or worse off by additional legislation. And if further legislation be expedient the inquiry then is, along what lines must it proceed?

We may consider the problem of federal regulation in a somewhat progressive way:

(1) Source of federal power.
(2) Limitations of federal power.
(3) Existing federal legislation.
(4) *Status* without effective federal legislation.
(5) Expediency of additional federal legislation.

[1] The powers of the State and National governments with respect to rates are similar within their respective spheres. The principles, therefore, which we have considered with respect to State regulation apply to federal regulation; and the last chapter must be read in connection with this chapter to obtain a full consideration of the subject.

(6) Forms additional legislation cannot take.

(7) Form additional legislation can and ought to take.

"The Congress shall have power . . . to regulate commerce with foreign nations and among the several States and with the Indian Tribes."[1] In these words the Constitutional Convention created the federal commercial power.[2] The power to regulate commerce is to prescribe the rules by which it shall be governed. It extends to all agencies and instrumentalities by which commerce is carried on. Railroads operating across State lines are subject to the control of Congress. They are common carriers employed in interstate commerce. And (1) because they are common carriers and their business affected with a public interest, and (2) because they are engaged in interstate commerce, Congress has power to regulate their charges. Railroad rates upon all traffic which does not begin and end within the limits of a State are exclusively subject to the control of Congress.[3]

Source of federal power.

[1] Constitution of United States, Art. 1, sec. 8, par. 3.

[2] The framers of the Constitution builded better than they knew. There is nothing to indicate that anything more was in their minds in respect of interstate commerce than the prevention of imposts at State lines. But the language used was broad and comprehensive and has become applicable to modes of transportation incomparably changed from the wagon and stage-coach of 1787. The full meaning of the commerce clause has been evolved through interpretation in a series of decisions by the Supreme Court of the United States, beginning with the great case of Gibbons *v.* Ogden, 9 Wheaton's Rep. 1.

[3] Wabash etc. R. Co. *v.* Illinois, 118 U. S. Rep. 557.

The power of the federal government to regulate rates is subject to no limitations other than those contained in the Constitution. The limitations which are applicable are three:

Limitations of federal power.

(1) The division of the functions of government into three departments — legislative, judicial, and executive.

(2) The Fifth Amendment.

(3) The provision against port preferences.

I. The constitutional division of governmental powers is the same in the nation as in the States. The functions which the different departments may exercise are identical in the federal and State governments. It is, therefore, unnecessary to repeat the principles — which we have examined at length and found clearly established — defining the functions of legislature and judiciary in respect of rates. They apply as well to federal as to State regulation, and we may safely formulate and re-state the conclusions reached, with especial reference to action by Congress:

(1) Making rates for the future is purely a legislative function;

(2) Congress may exercise this power to make future rates either directly or through a commission;[1]

[1] It is not necessary to rely upon authorities referring to State statutes in order to support this conclusion. In the *Maximum Rate Case*, 167 U. S. Rep. 479, the Supreme Court of the United States recognized that Congress might confer upon the Interstate Commerce

(3) Rates made by a commission have the same effect as if made by Congress directly;

(4) Determining in a controversy the reasonableness of an existing rate is a judicial function;

(5) Judicial and legislative functions cannot be combined;

(6) And — drawn from the federal Constitution by itself — judicial functions can only be exercised by judges holding their offices during good behavior and receiving a compensation which cannot be diminished during their continuance in office.

II. The Fifth Amendment of the Constitution of the United States — the second limitation — declares that "no person shall be . . . deprived of life, liberty or property without due process of law; nor shall private property be taken for public use without just compensation." This constitutional provision imposes the same limitations upon the powers of Congress as the similar provision in the Fourteenth Amendment places upon the State legislatures. The decisions of the courts regarding the effect of the

Commission power to make rates, but held that such power would not be granted by implication. The Court said: "The present inquiry is limited to the question as to what it [the Interstate Commerce Act] determined should be done with reference to the matter of rates. There were three obvious and dissimilar courses open for consideration. Congress might itself prescribe the rates; *or it might commit to some subordinate tribunal this duty*; or it might leave with the companies the right to fix rates, subject to regulations and restrictions, as well as to the rule which is as old as the existence of common carriers, to wit: That rates must be reasonable."

Fourteenth Amendment upon State statutes regulating rates, therefore, clearly indicate the effect which would be given to the Fifth Amendment in case of similar federal legislation. Here again it is unnecessary to repeat the principles which we examined at length in the last chapter. We need only put in form our conclusions with especial regard to federal action:

(1) Rates made by Congress directly or through a commission have the force of law. Making a rate in effect is making a law that such shall be the rate.

(2) The courts can alone determine whether law-made rates conflict with the Fifth Amendment.

(3) Law-made rates only conflict with the Fifth Amendment when they deprive the railroad of its property without just compensation or due process of law, *i. e.* when they are confiscatory.

(4) Schedules of rates may be confiscatory. Theoretically, individual rates may be confiscatory; practically, they cannot be.

(5) A rate may be unreasonable and, therefore, an unlawful charge when made by a railroad. The same charge as a law-made rate may not be so unreasonable as to be confiscatory.

(6) Courts can only pass upon the constitutionality of law-made rates. They cannot exercise supervisory power over such rates and thereby participate in the exercise of the legislative power of making rates.

III. We now reach our third limitation upon the federal power. The Constitution provides that "no preference shall be given by any regulation of commerce or revenue to the Ports of one State over those of another."[1] This clause must be considered at some length as it is unlike any State limitation which we have examined.

This provision was undoubtedly intended by the makers of the Constitution only to prevent the granting of preferences to vessels entering or clearing from the ports of a particular State. Its object was to make port privileges uniform. It was adopted before railroads were dreamed of, and it is doubtful whether it applies to land transportation at all. But constitutions are living instruments. Their words are changeless, but the meaning is not always the same. The Commerce Clause, itself, was framed with especial view to intercourse by water. It has been adapted through judicial interpretation to fit modern conditions. So it is not safe to say that the provision against port preferences, which has yet received little judicial attention, would not be given a much broader meaning than the framers of the Constitution had in mind.

We may assume that if Congress should pass an act fixing rates, and directly conferring an advantage upon the ports of one State over those of another, it would be unconstitutional. But if the advantage only resulted indirectly from the operation of the

[1] Constitution of United States, Art. I, sec. 9, par. 6.

act, it seems that it would not be unconstitutional. A direct preference of the ports of one state over those of another is prohibited; an indirect or incidental advantage is not invalid. In the Wheeling Bridge Case[1] — one of the few cases where this provision has been considered — the Supreme Court said: "It will not do to say that the exercise of an admitted power of Congress conferred by the Constitution is to be withheld if it appears, or can be shown, that the effect and operation of the law may incidentally extend beyond the limitation of the power. Upon any such interpretation the principal object of the framers of the instrument in conferring the power would be sacrificed to the subordinate consequences resulting from its exercise. The consequences and incidents are very proper considerations to be urged upon Congress for the purpose of dissuading that body from its exercise, but afford no ground for denying the power itself, or the right to exercise it."

An act conferring upon a commission power to make reasonable rates would not conflict with the provision against port preferences. The contingency that the commission, in making a rate, might unduly prefer the ports of one State would not affect the validity of the act conferring the power. The commission would act subject to all constitutional limitations. If it exceeded its powers and unlawfully preferred one port over another, *its* act

[1] 18 Howard's Rep. 421, *per* Nelson J.

— the rate made by it — would be invalid, but the law would be unaffected. That a commission in violating its duty may infringe a constitutional provision does not make the act creating it unconstitutional.

The question of constitutionality relates rather to the act of the commission than to the act of Congress. It is, therefore, necessary to go one step further and consider what rates made by a commission would constitute a preference between ports. A preference, within the meaning of the constitutional provision, seems clearly to mean an *undue* advantage. The commission would have the right to consider the conditions of the railroads and the traffic going to different ports. The requirement of a uniform charge per ton per mile to different ports instead of treating the ports with equality might give the very preference prohibited by the Constitution. Levelling rates without regard to conditions would create uniformity without equality.

But what would be the result should a commission, with rate-making power, attempt to adjust differentials between different ports? An arbitrary differential would undoubtedly infringe the constitutional provision against port preferences — assuming that it applies to land transportation. A differential based upon differences in conditions, on the other hand, would not seem to be an unlawful preference. But these and similar questions relate rather to the working of a law giving a commission

power to make rates, than to the constitutionality of the law itself.

Existing federal legislation.

The Interstate Commerce Act contains the only regulation of railroad rates ever adopted by Congress. The Act provides that all charges for transportation services shall be "reasonable and just," and creates the Interstate Commerce Commission to enforce its provisions.

The Commission never attempted to prescribe rates in the first instance. Acting, however, upon the theory that power to pass upon the reasonableness of a rate implies power to name one to take its place if found unreasonable, it exercised the latter power for several years after its creation. While this practice was not unquestioned, it went on and increased until 1896 when the Supreme Court in the Social Circle case[1] doubted its validity, and the next year in the Maximum Rate case[2] held "that the power to prescribe rates or fix any tariff is not among the powers granted to the Commission" — that under no conditions had the Commission authority to fix maximum, minimum or absolute rates for the future.

It cannot be said that this decision took away the rate-making power from the Commission. It never had the power to take away. It did, how-

[1] Cincinnati etc. R. Co. *v.* Interstate Commerce Commission, 162 U. S. Rep. 184.

[2] Interstate Commerce Commission *v.* Cincinnati etc. R. Co., 167 U. S. Rep. 479.

ever, demonstrate the absolute inability of the Commission to deal with unreasonable charges. The Commission may find a rate excessive, and order the railroad to desist from charging it. The railroad may comply with the order and reduce the rate just as much or just as little as it sees fit. On the other hand, it may ignore the order, contest the matter over again in the courts, and in the end — if unsuccessful — act in a similar manner. In this way, after years of litigation, an excessive charge may be reduced a trifle. The extent of any reduction depends entirely upon the views of expediency held by the railroad officials. Any substantial reduction would be wholly voluntary.

The Interstate Commerce Act authorizes persons who have sustained damages by excessive charges to make complaint to the Commission or to institute suit for their recovery in a federal court. If in these proceedings it be finally determined that the rate complained of is unreasonable, the party injured may recover the difference between what he actually paid and what he ought to have paid. But he could have obtained precisely the same relief without any statute. Actions for the recovery of damages from common carriers who have made unreasonable charges have always been maintainable at common law.

Finally, the Interstate Commerce Act provides that the findings of the Commission shall be *prima facie* evidence, in all judicial proceedings, of the facts

found. And this is the only real power of the Commission over excessive charges — it may make a finding which will have the effect of shifting the burden of proof.

Status without effective federal legislation.

The Interstate Commerce Act is wholly ineffectual in dealing with unreasonable rates. It leaves the situation practically as it was at common law. It is, therefore, desirable to consider what are the common-law remedies of shippers against unreasonable charges and where they leave the shippers when they are enforced.

Under the common law, a shipper, claiming to be aggrieved by an unreasonable charge, may maintain an action to recover back from the carrier the amount paid in excess of a reasonable rate. He cannot obtain his goods without paying the charge. But an action to compel restitution affords no real remedy. The small shipper will generally lose more than he will gain by such a proceeding, even if he win his case. The large shipper will hesitate long before he enters into a controversy with the railroad in the complex matter of charges — a controversy which, regardless of result, must be expensive, and is likely to be long drawn out. And such an action settles little. The shipper who wins recovers back the comparatively small sum paid by him in excess of a reasonable charge, but nothing is accomplished for the future — and nothing is accomplished with respect to the past except in the case of that particular shipper. It is not surprising, therefore, that

actions by shippers to recover amounts paid to carriers in excess of reasonable charges have been few and far between. As said by the Supreme Court of the United States: "Any individual shipper would in most cases be apt to abandon the effort to show the unreasonable character of a charge sooner than hazard the great expense in time and money necessary to prove the fact, and at the same time incur the ill-will of the road itself in all his future dealings with it."[1]

Existing remedies for unreasonable charges fail in two respects:

(1) They are ineffectual as far as they go.

(2) They do not go far enough.

As we have seen, the attempt by an individual shipper to secure the restitution of moneys paid for unreasonable charges is so hedged about with costs and difficulties that few will make it. The small number who bring suit may recover a few dollars at an expense exceeding the amount recovered; the vast majority who refrain from proceeding may in the aggregate be damaged to the extent of thousands of dollars by an excessive charge. A multiplicity of suits will be necessary for all to obtain relief. The relief when obtained will cost more than it is worth. If it be expedient that any further remedy should be provided, it should proceed along the line of adjudicating the reasonableness of a charge *before* and not *after* it is paid.

[1] Trans-Missouri Freight Ass'n Case, 166 U. S. Rep. 332.

Any effective relief for the shipper involves, in the first place, the determination by a competent tribunal, with little expense and delay, of the reasonableness of a rate complained of. But determining the reasonableness of an existing charge without prescribing the rate to supersede it, if found unreasonable, stops at the vital point. The adjudication that rates in the past have been unreasonable does little good if the same rates are to prevail in the future. If additional legislation be expedient at all, it must look to the future as well as the past. And whether it be expedient or not, one thing is certain: Existing remedies afford the shipper inadequate relief from unreasonable charges.

Having found that existing remedies are no remedies, we approach the question whether it is expedient that Congress should afford a real remedy.

Expediency of additional federal legislation.

The first phase of the question is whether — assuming that legislation is required — *federal* action is necessary. This is soon disposed of. The great bulk of the traffic in the United States is interstate traffic. Congress alone can deal with charges upon it. Each State might adopt the most effectual laws, and the situation be little changed. Adequate relief necessitates federal action. It can come from no other source.

The second phase of the question relates to the remedy proposed. Whether it be expedient to enact additional federal legislation depends upon the nature

of the legislation. We have seen that, at present, the shipper is practically remediless in the case of unreasonable charges. But an effective remedy may be inexpedient if radical; may be expedient, if conservative. If it reach the wrong complained of and stop, it may be entirely proper; if it go further, it may in the end do more harm than good. A radical measure of relief for unjust charges would be to take the rate-making power entirely out of the hands of the railroads. Particular cases of injustice might be remedied. But, as we have seen,[1] governmental making of initial charges would be wholly impracticable; would deprive rates of that adaptability to conditions essential to the development of traffic, and would tend to level them up instead of down. The remedy would be worse than the disease; not only for the railroads, but, in the long run, for the shippers. Initial tariffs must be made by the railroads. No other course is seriously proposed. Affording a remedy when charges are found unreasonable alone is practicable.

Conservative action by Congress which goes no further than to deal with definite evils, and anything less than which would leave the situation practically unchanged, is to provide a method for

(1) Determining by public tribunal the reasonableness of rates complained of;

(2) Making by public authority rates to take the place of those found unreasonable.

[1] See page 60.

The precise form the action should take we will consider later. Let us now look at the expediency of taking the action indicated in *any* form. And at the outset let us go back to the first principles of rate making. Whether rates should be regulated may depend upon how rates are made.

Now if any one thing is established as a result of our examination, it is that charging according to the value of the service is the only feasible method of making rates. It is both impracticable and undesirable to base them upon cost of service. Equal mileage rates are out of the question. The only way is to base charges upon ability to pay. But in measuring ability and differences in ability there is no definite rule to go by. The limits within which the rates may be placed are wide apart. Estimate and comparison are required. The method is so flexible and elastic that there is much room for honest differences of opinion between shippers and railroad officials as to the precise point where the rate should be fixed. If it were possible to base rates upon cost, it might well be urged that the railroad officials had the superior knowledge. But in judging ability to pay — making what is necessarily more or less of a hap-hazard estimate — the difference in knowledge is not so apparent. In case of controversy, it is hardly fair that one of the interested parties should have the sole power of decision.

Charging according to the value of the service

puts into the hands of the railroad officials a power fundamentally like that of taxation. The foundation of both is ability to pay. And while rates are not really taxes, and while the value principle is legitimate and the only practicable basis of rates, its application, unrestricted, may lead to arbitrary differences and unreasonable charges. There may be opportunity for injustice in the operation of a just principle. The very nature of the practice followed in making rates for public services shows the necessity for some measure of public supervision.

We have seen that competition neither benefits the railroads nor the public; that pooling should be encouraged and not prohibited, and that the dangers of consolidation lie rather in the concentration of power for collateral purposes, than in the elimination of competition. But this is all upon the theory that the railroad, although a monopoly, is subject to governmental regulation in respect of its charges. If possible arbitrary power be restrained and controlled there is no objection to a monopoly. If, on the other hand, the power be entirely unrestrained, it cannot be denied that there are grave possibilities of danger. It is generally conceded that the control of the greater part of the railroad mileage of the United States is held by a small group of financiers. But this, standing alone, does no harm from the rate standpoint. Even if all the railroads in the country were combined into one system, the public could not complain if efficient services were rendered

at reasonable rates. All the more necessary, however, would be efficient measures of relief if rates were *not* reasonable. And all the more does the tendency toward consolidation indicate the necessity for such measures.

Thus far our examination shows clearly the necessity and expediency, not of taking from the railroads the power to make rates in the first instance, but of providing effective means for dealing with particular unjust charges when they are found to exist. This is not going far; and it seems necessary to go so far if the shipper is to feel that he has a fair chance to assert his rights. The feeling of impotency upon the part of the shipper is a real evil. It is not vitally important whether in fact unjust charges be many or few. It *is* important that the shipper should have an opportunity of presenting the justice of the charge complained of, in an expeditious way, to a disinterested tribunal. The *existence* of a remedy might do more to allay popular apprehension than any possible resort to it.

Now taking up the objections. It is said that however ineffectual the remedies of the shipper may be, it does not follow that the proposed legislation is called for. It is pointed out that rates in the United States have shown a steady decrease for a long period of years, and that although the decrease has been arrested in the last few years, average rates are still below those existing in any other country. And it is said with truth that there is no

cause for alarm in the general average of rates. But this objection, in the first place, does not quite hit the mark. Legislation may be expedient — as we have just seen — if unreasonable charges be few. In the second place, a reasonable average does not disprove the existence of unreasonable charges in particular instances. Some rates may be very high and some very low and yet the average be entirely reasonable. Making rates is a complex problem. Railroad officials are not infallible. Errors of necessity must exist. Unjust charges must creep in notwithstanding the greatest care and best judgment of the most competent traffic managers.[1] Railroad officials will correct many errors themselves. But if they refuse to take action, and deny that errors exist, something is lacking if their refusal end the matter.

Another general objection to any governmental interference with rates is that they are governed by natural laws and are determined by business conditions. This is true in a way. Competition is a natural regulator of prices. But railroad competition only exists in particular places, and is growing less and less in those places as consolidations go on. Competition of markets sometimes brings down the general level of rates. Natural laws do affect the average rate, but they have little effect upon a par-

[1] The testimony of witnesses before Congressional committees in recent years has disclosed many instances of apparently unreasonable rates, as distinguished from discriminating charges.

ticular charge. When it is claimed that a given charge is unreasonable it is of little use to say that according to natural conditions it ought not to be. Excessive charges generally take care of themselves. It is the exceptional case where they do not which we are looking after. If the railroad's business were private the remedy in this exceptional case would be found, if found at all, in economic principles. But its services are not private; and for that very reason economic principles cannot be wholly relied upon.

But while the impotency of the shipper under existing conditions is apparent, and while general objections to the limited governmental interference we are considering may be brushed aside, there is one objection which is entitled to careful consideration. It is obvious that power to make *any* rate in place of one found unreasonable is power to make *all* rates if all are found unreasonable. And this means something more than that the power is necessarily so broad that it is possible to exercise it in a revolutionary way. That possibility might well be passed over if action were confined to cases where existing charges after complaint and hearing had been found unreasonable. But rates are interdependent. They are so adjusted that any alteration in one affects others. A change in a single rate may compel the modification of an entire schedule. The far-reaching effect of any exercise of the rate-making power affords the strongest argument against

its grant to any commission. And yet it cannot wholly overrule the necessity for some remedial legislation. The conclusion must be that some measures of relief are necessary, but that they must be of the most conservative character.

Another objection to any measure involving the making of rates by public authority is its impracticability. It is said that it cannot be shown that rates are unreasonable, because there is no standard of reasonableness. And it cannot be denied that it is impracticable, except under extraordinary circumstances, to show that a rate is unreasonable *per se*. But as we have seen,[1] it is legitimate to make comparisons with other charges; and it is by comparison that rates are, in fact, made. But even with comparison the difficulty of showing that a rate is unreasonable is obvious. The difficulties, however, are not insurmountable; and the fact that a shipper will encounter them constitutes no real reason why he should be denied the privilege of making the attempt.

Other objections are made to specific measures. Thus it is said that it is unwise, as well as unconstitutional, to clothe the Interstate Commerce Commission with judicial as well as legislative powers — that it should not act as prosecutor as well as judge. It is also urged that the general rate-making power in the hands of any political board — readily susceptible to popular clamor — could not fail in

[1] See page 61.

the end to operate disastrously to the railroads. But as these objections are inapplicable to the measures we shall propose, it is unnecessary to consider them.

Going back then to the measures indicated as necessary, we reach the conclusion that it *is* expedient that Congress should adopt additional legislation providing a method for

(1) Determining by public tribunal the reasonableness of rates complained of.

(2) Making by public authority rates to take the place of those found unreasonable.

And now the question arises as to the particular form the legislation should take.

Rate regulation generally proposed involves three progressive steps:

Forms additional legislation cannot take.

(1) The adjudication by the Interstate Commerce Commission, after due hearing, of the reasonableness of a rate complained of.

(2) If a rate be found unreasonable, the prescribing by the Commission of a rate to take its place.

(3) The review of the action of the Commission by the courts.

The Esch-Townsend bill passed by the last House of Representatives (1905) may be taken as fairly typical of the proposed measures, and as in accord with the recommendations of the Interstate Commerce Commission and with the crystallization of public sentiment. The bill provides that "when-

ever upon complaint duly made . . . the Interstate Commerce Commission shall, after full hearing, make any finding or ruling declaring any existing rate . . . unreasonable or unjustly discriminating, the Commission shall have power, and it shall be its duty to declare and order what shall be a just and reasonable rate . . . to be charged . . . in the future in place of that found to be unreasonable . . . but at any time . . . any person or persons directly affected by the order of the Commission, and deeming it to be contrary to law, may institute proceedings in the court of transportation sitting as a court of equity, to have it reviewed and its lawfulness, justice, or reasonableness inquired into and determined."

Before considering the wisdom of adopting this measure let us test it by the standard of constitutionality. If it be unconstitutional it is unnecessary to examine it further. And that it is unconstitutional appears evident. This bill and other proposed measures along similar lines seem to be invalid for two reasons:

(1) They require the exercise of judicial functions by the Interstate Commerce Commission.

(2) They require the exercise of non-judicial functions by the courts.

I. In the preceding statement of the limitations of federal power the following principles were stated as the result of the previous examination:[1]

[1] See page 225.

(1) *Determining in a controversy the reasonableness of an existing rate is a judicial function.*

(2) *Judicial and legislative functions cannot be combined.*

(3) *Judicial functions can only be exercised by judges holding their offices during good behavior and receiving a compensation which cannot be diminished during their continuance in office.*

Applying these principles to the proposed measures, it seems clear that they are unconstitutional because they attempt to confer judicial powers upon the Interstate Commerce Commission. The Commission is not a court. Its members hold office for a limited term. It is vested with numerous non-judicial powers which it could not exercise if it were a court. Judicial powers cannot constitutionally be conferred upon it. Now repeating the language of the Supreme Court of the United States — "to inquire whether the rates which have been charged and collected are reasonable — that is a judicial act. . . . For more than a hundred years it has been the affirmative duty of the courts to execute and enforce the common law requirement that all charges shall be reasonable and just."[1] Therefore, the power to determine the reasonableness of charges and to grant relief being a judicial power, it cannot constitutionally be conferred upon or exercised by the Interstate Commerce Commission, as contemplated in the proposed measures.

[1] Maximum Rate Case, 167 U. S. Rep. 479, 501.

It may be urged, however, that a finding by the Commission under the proposed acts that rates are unreasonable merely makes *prima facie* evidence of that fact — that the whole question of reasonableness must finally be determined by the courts. This clearly is not what the measures contemplate. The Esch-Townsend bill provides for a *revision* of the action of the Commission by the courts, but this manifestly proceeds upon the theory that the decision of the Commission has binding effect until reviewed and set aside. In fact the bill expressly provides that the order of the commission making a substitute rate shall "take effect and become operative thirty days after notice thereof." Now the fact that a decision is subject to review makes it nevertheless judicial. The decisions of most courts are subject to review by a superior tribunal.

But it may be sought to differentiate between the finding of unreasonableness and the order making the substitute rate. It may be said that the order is subject to review, but that the finding — like other findings of the Commission — has only a probative effect; that it comes before the courts for enforcement, not review. If this suggestion be well founded one court might rule that the finding of unreasonableness should not be enforced; another court might determine that the order making a new rate should not be set aside. In this way a railroad might be prevented by one court from charging a rate found by another court to be entirely reason-

able and just. Manifestly, the finding and the order — the one dependent upon the other — must be considered together. And if the finding and order be effective and operative until reviewed, the making of the finding involves the exercise of a judicial power, which cannot be exercised by the Interstate Commerce Commission. If an attempt be made to avoid this conclusion by making both the finding and the order inoperative until enforced by the courts, we have a measure which is not only ineffectual, but which runs against the objection that it directly requires the courts to exercise legislative powers. We shall later notice this objection with respect to the provisions for review, and it, of course, applies with still greater force if the courts are called upon to really make the rates. And even if this were done it is not clear that the function of the Commission, in passing upon the reasonableness of a rate complained of, would not be judicial in its nature. The question is a judicial question. It is presented by interested parties. The decision of the Commission, at the least, has the effect of shifting the burden of proof upon a complex question. The function of the Commission in the matter clearly is not legislative or executive. If it be not judicial what is it? Some of the books call it *quasi*-judicial; but the word "*quasi*" is often used merely to cover a doubt.

But there is another and more serious objection to our claim that the proposed measures are uncon-

stitutional. It may be said that while determining the reasonableness of an existing rate may be a judicial, it may also be a legislative, function. And it must be admitted that this is true. The exercise of legislative power always involves a determination that action is required. If Congress were to undertake the making of new rate schedules it might well inquire whether existing charges were just and reasonable and required change. Similarly power might be conferred upon the Interstate Commerce Commission to make any changes in rates which in its judgment were conducive to reasonable charges. Notice and hearing would not be necessary, because not essential to legislative action. If any hearing were had it would be for the purpose of obtaining information for general action and not for affording relief in particular cases. But no such procedure is contemplated in the proposed measures. The Esch-Townsend bill only authorizes the Commission to act upon complaint of a party aggrieved and after a full hearing.[1] The Interstate Commerce

[1] Under the Esch-Townsend bill the Interstate Commerce Commission can act only "upon complaint duly made under section thirteen of the Act to regulate commerce." The section referred to reads as follows: "That any person, firm, corporation, or association, or any mercantile, agricultural, or manufacturing society, or any body politic or municipal organization complaining of anything done or omitted to be done by any common carrier subject to the provisions of this act in contravention of the provisions thereof, may apply to said Commission by petition, which shall briefly state the facts, whereupon a statement of the charges thus made shall be forwarded by the Commission to such common carrier, who shall be called upon

Commission in its last report[1] said with respect to the proposed procedure: "After service of complaint upon the carrier or carriers, after full hearing of each carrier and shipper interested, and careful investigation, a report and opinion would be rendered, and if the decision should be against the carrier an order would be entered directing it to cease and desist from charging the rate complained of, and to substitute therefore a rate found, upon the evidence before the Commission to be reasonable and just. *This procedure is essentially judicial in character and form.*"

The procedure outlined by the Commission and required by all the proposed measures conferring additional powers upon it *is* essentially judicial. All the forms of legal controversies are present: (1) the complaint, (2) the notice to the adverse party, (3) the hearing, (4) the judgment. The fact that a decision of the Commission finding that an existing rate cannot longer be charged because it is unreasonable may be far-reaching and affect other persons

to satisfy the complaint or to answer the same in writing within a reasonable time, to be specified by the Commission. If such common carrier, within the time specified, shall make reparation for the injury alleged to have been done, said carrier shall be relieved of liability to the complainant only for the particular violation of law thus complained of. If such carrier shall not satisfy the complaint within the time specified, or there shall appear to be any reasonable ground for investigating said complaint, it shall be the duty of the Commission to investigate the matters complained of in such manner and by such means as it shall deem proper."

[1] Report of Interstate Commerce Commission, 1904, p. 8.

than the particular complainant, does not render it non-judicial. Such is often the effect of judicial decisions. Nor does the fact that the Commission might be empowered to act in a non-judicial way — to inquire into the reasonableness of existing rates merely for the purpose of obtaining information upon which to base future charges — change the character of its act when it is authorized to exercise a judicial function in a judicial way.

II. The second reason why the proposed measures of rate regulation are unconstitutional is that they impose non-judicial functions upon the courts. The various bills suggested contemplate a judicial review of the action of the Interstate Commerce Commission. The Esch-Townsend bill provides that after the order of the Commission making a new rate is entered, proceedings may be instituted in a special court of transportation "to have it reviewed and its lawfulness, justice, or reasonableness inquired into and determined." These provisions for review by the courts are essential features of the proposed measures; and without which they could not have received anything like the support given them. A fundamental idea of the proposed legislation has been the judicial review of the action of the Commission. And yet it seems clear that the courts cannot exercise the proposed power of review and that it cannot constitutionally be conferred upon them. Let us recur to the principles which we have already found established:

(1) *Making rates for the future is purely a legislative function.*[1]

(2) *Rates made by Congress directly or through a commission have the force of law. Making a rate in effect is making a law that such shall be the rate.*

(3) *Law-made rates only conflict with the Fifth Amendment when they deprive the railroad of its property without just compensation or due process of law, i. e. when they are confiscatory.*

(4) *Schedules of rates may be confiscatory. Theoretically, individual rates may be; practically, they cannot be.*[2]

Applying these principles to the proposed measures their unconstitutionality is apparent. It seems impossible to draw a constitutional statute conferring upon a court power to review upon the facts the action of the Interstate Commerce Commission in making a rate. The courts could not make a rate, for rate-making is not and cannot be a judicial function. They cannot supervise the action of the Commission for precisely the same reason. There is no difference in principle between making a rate and reviewing, upon its merits, the action of a commission in making a rate. In both cases the exercise of legislative, not judicial, discretion is required. A statute requiring the courts to participate directly or indirectly in making rates for the future would impose non-judicial functions, and would be unconstitutional.

To repeat what we have already pointed out — it cannot be too clearly borne in mind that while

[1] See page 224. [2] See p. 226.

the courts can determine the reasonableness of a carrier's charges, they cannot, in the same way and from the same point of view, determine the reasonableness of commission-made rates. When a rate is made by a commission under a law it has the effect of a law which the courts can only review upon constitutional grounds. The distinction is between the reasonableness of a charge and the reasonableness of a law.

But it may be said that the courts always have examined rates made by commissions to determine whether they are reasonable, and decisions of the Supreme Court of the United States may be pointed out where the enforcement of commission-made tariffs has been enjoined because the rates were unreasonable. But, as we have already seen, the word "unreasonable" in the sense of these decisions means confiscatory. The only ground upon which the courts could interfere with rates made by the Interstate Commerce Commission would be that they violated the Fifth Amendment of the Constitution — that they deprived the railroad of its property without just compensation or due process of law. And they could only have that effect when they were confiscatory.

It is sometimes urged, however, that if rates made by a commission are declared to be merely *prima facie* reasonable that the courts may be empowered to review them.[1] But this runs against

[1] It has been held that a statute authorizing a commission to prescribe charges to have the effect of *prima facie* evidence of reasonable rates

our first objection, that the rate-making power cannot be exercised, directly or indirectly, by the courts. There seems to be no escape from these two conclusions:

(1) The courts can only interfere with commission-made rates when they are confiscatory;

(2) Supervisory power over future rates made by a commission cannot be conferred upon the judiciary because it is non-judicial.

Morever, the constitutional protection against confiscatory rates is practically applicable only to tariffs in the whole or substantial part. Even if a commission make an individual rate extremely low it can rarely be declared confiscatory. The railroad may have an ample income from other rates. It does not follow from the fact that a commission reduces one charge that it is going to reduce others. Railroads themselves often reduce particular rates for particular reasons. As a practical matter it is difficult to see how any measure whatever of judicial review can be provided for individual rates fixed by a commission. The situation should be fairly faced, that judicial review of rates must take place, if at all, *before* and not *after*

in suits involving the question whether a charge made by a railroad is reasonable is constitutional. (Chicago etc. R. Co. *v.* Jones, 149 Ill. Rep. 361.) Such a statute, however, has merely the effect of shifting the burden of proof upon the railroad. It may make its own rates, regardless of the action of the commission, but must justify them when questioned. The rate reviewed by the courts is that of the railroads and not that of the commission.

the action of a commission having rate-making power.

III. Other measures of rate regulation — eliminating any rate-making commission — have also been proposed. Thus while recognizing that rate-making is a legislative function it has been suggested that in case a complaint be made to a court that a given charge is unreasonable the court may enjoin the collection of anything in excess of a reasonable rate. But what the courts cannot do directly they cannot accomplish by indirection. A carrier may be enjoined from collecting an unreasonable charge for a particular service, but the courts cannot go further and determine what a reasonable charge would be, and enjoin the collection of more than that in the future. This would be equivalent to exercising the legislative power of making future rates.[1]

But the suggestion goes further. It is said that Congress might pass a law requiring the courts, when determining that an existing rate is unreasonable, to go further and find what would be a reasonable charge for the particular service, and that thereupon the rate so found should be the future charge. In such a case the finding would merely furnish a basis for the operation of the

[1] In so far as the case of Janvrin, 174 Mass. Rep. 514, is in conflict with the principle stated in the text, it seems opposed to the weight of authority. It is not believed that the power to make future rates, whether with regard to interests before the courts or not, can be exercised by the judiciary.

statute. The rate for the future would take effect by virtue of the act of Congress and not of the finding of the court. Such a law would undoubtedly be constitutional with respect to the operation of the rate found by the court. Congress could declare that rates fixed by the courts should be the future charges. But it is not so clear that the courts could be required to furnish the basis for the operation of the statute. Only in the case of a suit for the recovery of excessive charges paid to the carrier is there any necessity for a finding of reasonableness after a finding of unreasonableness. The courts might enjoin the collection of a rate of one dollar as an unreasonable charge. There would be no necessity for determining whether eighty or ninety cents would be reasonable. While the courts, in determining that a charge is unreasonable, undoubtedly go through the process of determining what is reasonable, there is no necessity, for the purposes of a *judicial* decision, for them to record such process. The determination of a reasonable rate in the plan suggested would be for the sole purpose of furnishing the basis for the operation of the statute. The courts would really be taking the first step in making a rate. They would be called upon to exercise a function not clearly judicial, because not essential to a judicial decision. It seems probable that they would decline to exercise it.

We have now seen that any effective regula-

tion of rates requires that after an existing charge has been declared unreasonable another should be substituted in its place for the future. We have also seen that the function of determining the reasonableness of rates in a controversy between shipper and carrier is judicial; while the function of making a new rate is purely legislative. We have further seen that judicial and legislative powers cannot be granted to one tribunal.

Form additional legislature can and ought to take.

It follows, therefore, that any effective measure of relief requires the progressive action of two tribunals:

(1) The judicial question of the reasonableness of the rate complained of must be determined.

(2) If a rate be judicially found to be unreasonable the legislative power of making a new rate should be administered.

There is no difficulty in outlining a plan of procedure for the determination of the necessary questions in an orderly and speedy way — a plan which steers clear of all possible constitutional questions and which, in its essence, is merely a reversal of the procedure of the proposed measures.

First. A special court should be created in accordance with the constitutional provisions concerning the federal judiciary. Complaints made by persons aggrieved — or in their behalf by a public official or board — that specific railroad rates upon interstate traffic are unreasonable and unjust should

be presented to this court. After speedy notice to the carrier the court should summarily inquire into the reasonableness of the rate complained of. If found reasonable, the complaint should be dismissed; if found unreasonable, the court should enjoin its further collection. This would end the function of the court.[1]

Second. In case a rate were found unreasonable all the papers in the case, together with the evidence, should be certified to the Interstate Commerce Commission which should be empowered, upon an inspection of the papers, to then make a maximum rate to take the place of that found unreasonable by the court.[2] The rate prescribed should remain in force a prescribed time but should be subject to modification by the Commission. No hearing before the Commission would be necessary or expedient. Speedy action would be possible and should be required.[3]

[1] While a special court would for many reasons be more desirable, the same procedure could be provided for by a simple amendment of the Elkins law authorizing the circuit courts of the United States to pass upon the reasonableness of rates made by carriers and to enjoin those found unreasonable, just as they pass upon questions of discrimination under that law, and according to the same summary course of procedure.

[2] The Commission should only be empowered to fix *maximum* charges. Rigid rates which could not be reduced when occasion required would operate prejudicially to the railroad and would be of no corresponding advantage to shippers. It is true that maximum rates leave the railroad power to reduce charges to some shippers and not to others. Discriminations, however, can be effectively dealt with in another way.

[3] The Commission might be authorized to itself present the com-

The advantages of this method of procedure are:

(1) It avoids all constitutional and legal objections. The principle that rates shall be reasonable and just being embodied in a federal statute, proceedings to enforce the principle present a controversy under the laws of the United States cognizable before the federal courts and which Congress could create a special court to determine.[1] The court when created would exercise a strictly judicial function in passing upon the reasonableness of the rate. The Commission would then act entirely within its own province in making the new rate.

(2) It follows a natural course. We have seen that it is inexpedient that any commission should have the initiative in rate-making — that new rates should only be made when existing charges have been found to be unjust. Action by the court then must precede action by the Commission. After the Commission has acted there is nothing to review except the constitutionality of its act.

(3) It is the only way in which there can be any action by the courts with respect to changes in

plaint of the unreasonableness of the rate to the court. In this way the Commission would be apprised of the nature of the case from the beginning, and would be able to make the substitute rate following the decision of the court with extremely little delay. The objection to this procedure is, however, that often made to other measures, that the Commission should not be required to act in inconsistent capacities — that having acted as prosecutor it could not approach the rate-making function with the strict impartiality required.

[1] See Tift *v.* Southern R. Co., 123 Fed. Rep. 790.

rates. Proposals for the review of the doings of the Commission cannot fail to prove illusory. If a judicial check to rate-making by the Commission be expedient it must be afforded by determining the necessity for changes before they are made, and not by setting them aside afterwards.

(4) It would be as expeditious as any other method. Procedure could readily be devised for speedily bringing on causes for hearing before the court. There should be no more delay in obtaining the determination of the reasonableness of a rate before a court than before the Commission — especially before a court created to determine such matters. The Commission in making the substitute rate should be required to act with expedition. When the Commission acts the matter is ended. Of course, if the rate made by the Commission be confiscatory the railroad has, and should have, its remedy — but this is true in the case of any rate made by any commission or by Congress itself. But, as we have seen, it is seldom that an individual rate *can* be confiscatory.

(5) It is fair to both shipper and railroad. The shipper can only expect that new rates will be made when the old ones are unreasonable. He must be satisfied with the decisions of the courts — the tribunals appointed to settle controversies. The carrier cannot find fault that the courts pass upon the reasonableness of charges. They have always had and exercised that power. When the railroad has

been found to make an unreasonable charge, it is not for it to complain that the legislature then steps in and says through its commission what the charge shall be in the future. Such a limited exercise of the rate-making power cannot be prejudical to any interest, and cannot fail to be effective in granting relief. If the power be never exercised its very existence will go far to prevent unjust charges.

The railroads and the people should have no quarrel. The prosperity of the country aids the railroads; the prosperity of the railroads helps the country. The railroads — more than any other factor — have contributed to the development of the United States. The upbuilding of the nation has been reflected in the evolution of the best and most successful railroad systems of the world. Conclusion.

The obligations of the public and the railroads are reciprocal. The interests of both require just and reasonable rates. Exorbitant charges curtail traffic. Fair rates increase business. Still with this economic check instances of unjust charges are unavoidable. The present system of making rates is best both for the public and the railroads; but it is so complex and, at the same time, so elastic that abuses must necessarily creep in. It is the duty of the public and of the railroads to unite in obtaining conservative remedial legislation.

Radical measures are neither necessary nor desirable. The people through their government have

hitherto adopted the *laissez faire* policy. Millions of dollars have been invested in the belief that this policy would continue. Conditions have changed. The development of the principle of combination renders some measure of legislative protection to the shipper necessary. But in justice to the railroads and their stockholders, laws should be confined to granting specific relief for specific evils — and granting it along the safest lines.

The obligation of the railroads under existing conditions to unite in the movement for conservative legislation is as clear as is the necessity for such legislation. The railroads should perceive that they are not merely private corporations — that their interests are bound up with those of the public. Their officials should recognize the popular feeling that the shipper does not now have a fair opportunity to assert his right to just charges. Instead of assailing all propositions of rate regulation, they should join in an effort to ascertain that which is most judicious. Defeating conservative measures merely incites radical action. That railroad official serves the interests of his stockholders best in the long run who never fails to appreciate the rights of the people. A contented public along its line is the best asset of a railroad company.

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